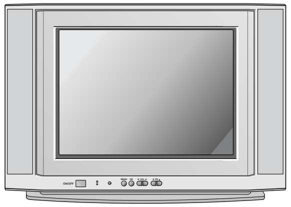
website:http://biz.lgservice.com

COLOR TV
SERVICE MANUAL

CHASSIS : CW62B

MODEL: 21FS2CLX/21FS2BLX
21FS2CLX-ZV/21FS2BLX-ZV

CAUTION
BEFORE SERVICING THE CHASSIS,
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



LG Electronics Inc.

P/NO : MFL31616408 ⓑ

Oct, 2006
Printed in China

CONTENTS

Contents 2

Safety Precautions...3

Control Descriptions 4

Specifications..7

Adjustment Instructions...8

SVC Remocon 13

Trouble Shooting 14

Printed circuit board..17

Block Diagram...19

Exploded View..19

Exploded View Parts List 21

Replacement Parts List 22

SVC. Sheet...

SAFETY PRECAUTIONS

IMPORTANT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by ⚠ in the Schematic Diagram and Replacement Parts List.
It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent X-RADIATION, Shock, Fire, or other Hazards.
Do not modify the original design without permission of manufacturer.

General Guidance

An isolation Transformer should always be used during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks.

It will also protect the receiver and it's components from being damaged by accidental shorts of the circuitry that may be inadvertently introduced during the service operation.

If any fuse (or Fusible Resistor) in this TV receiver is blown, replace it with the specified.

When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1W), keep the resistor 10mm away from PCB.

Keep wires away from high voltage or high temperature parts.

Due to high vacuum and large surface area of picture tube, extreme care should be used in handling the Picture Tube. Do not lift the Picture tube by it's Neck.

X-RAY Radiation

Warning:

The source of X-RAY RADIATION in this TV receiver is the High Voltage Section and the Picture Tube.
For continued X-RAY RADIATION protection, the replacement tube must be the same type tube as specified in the Replacement Parts List.

To determine the presence of high voltage, use an accurate high impedance HV meter.

Adjust brightness, color, contrast controls to minimum.
Measure the high voltage.
The meter reading should indicate
23.5 ± 1.5KV: 14-19 inch, 26 ± 1.5KV: 19-21 inch,
29.0 ± 1.5KV: 25-29 inch, 30.0 ± 1.5KV: 32 inch
If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.

Before returning the receiver to the customer,

always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as antennas, terminals, etc., to be sure the set is safe to operate without damage of electrical shock.

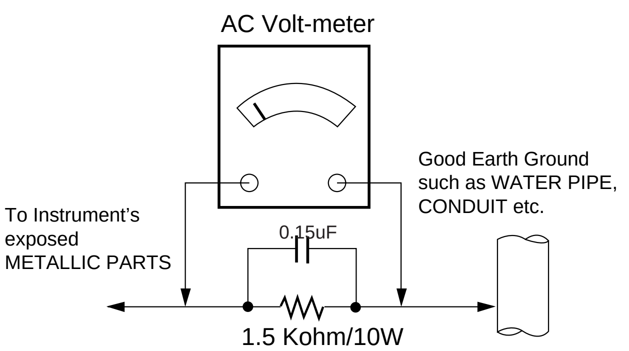
Leakage Current Cold Check(Antenna Cold Check)

With the instrument AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on position, connect one lead of ohm-meter to the AC plug prongs tied together and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc.
If the exposed metallic part has a return path to the chassis, the measured resistance should be between 1MΩ and 5.2MΩ.
When the exposed metal has no return path to the chassis the reading must be infinite.
An other abnormality exists that must be corrected before the receiver is returned to the customer.

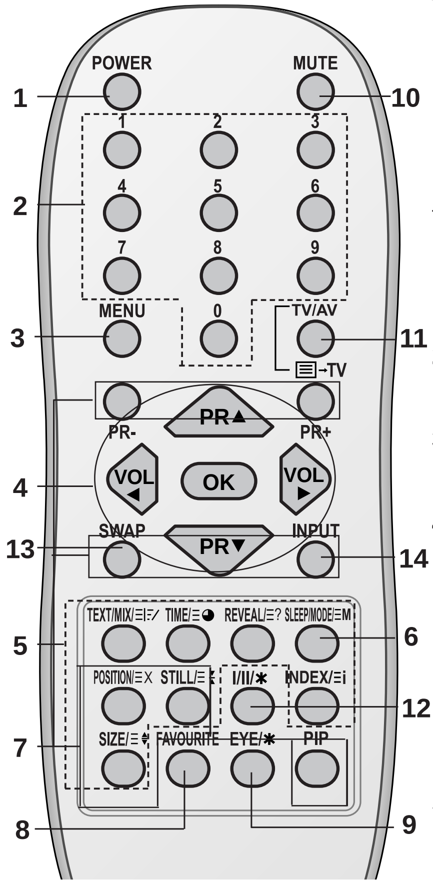
Leakage Current Hot Check (See below Figure)

Plug the AC cord directly into the AC outlet.
Do not use a line Isolation Transformer during this check.
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.
Measure the AC voltage across the resistor using AC voltmeter with 1000 ohms/volt or more sensitivity.
Reverse plug the AC cord into the AC outlet and repeat AC voltage measurements for each exposed metallic part. Any voltage measured must not exceed 0.75 volt RMS which is corresponds to 0.5mA.
In case any measurement is out of the limits specified, there is possibility of shock hazard and the set must be checked and repaired before it is returned to the customer.

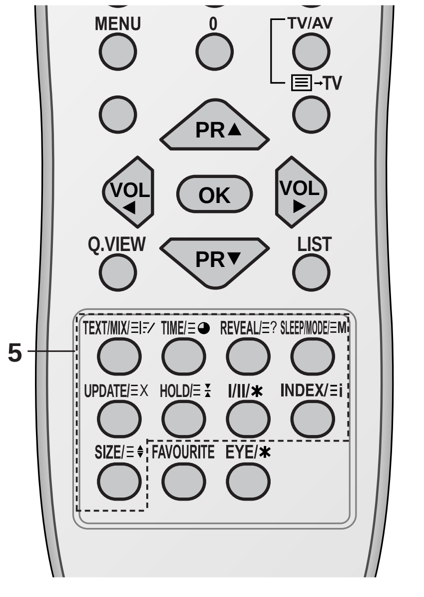
Leakage Current Hot Check circuit



DESCRIPTION OF CONTROLS



(With TELETEXT / PIP)



(With TELETEXT / Without PIP)

All the functions can be controlled with the remote control handset. Some functions can also be adjusted with the buttons on the front panel of the set.

Remote control handset

Before you use the remote control handset, please install the batteries. See the next page.

1. **POWER**
   switches the set on from standby or off to standby.

2. **NUMBER BUTTONS**
   Switches the set on from standby or directly select a number.

3. **MENU**
   selects a menu.

4. **▲ / ▼ (Programme Up/Down)**
   selects a programme or a menu item.
   switches the set on from standby.
   scans programmes automatically.
   ◀ / ▶ (Volume Up/Down)
   adjusts the volume.
   adjusts menu settings.
   OK
   accepts your selection or displays the current mode.

5. **TELETEXT BUTTONS (option)**
   These buttons are used for teletext.
   For further details, see the ‘Teletext’ section.

6. **SLEEP**
   sets the sleep timer.

7. **PIP BUTTONS (option)**
   PIP
   switches the sub picture on or off.
   PR +/-
   selects a programme for the sub picture.
   SWAP
   alternates between main and sub picture.
   INPUT
   selects the input mode for the sub picture.
   SIZE
   adjusts the sub picture size.
   STILL
   freezes motion of the sub picture.
   POSITION
   relocates the sub picture in clockwise direction.

8. FAVOURITE
selects a favorite programme.

9. EYE/✱ (option)
switches the eye function on or off.

10. MUTE
switches the sound on or off.

11. TV/AV
selects TV or AV mode.
switches the set on from standby.
exits the Teletext mode(option).

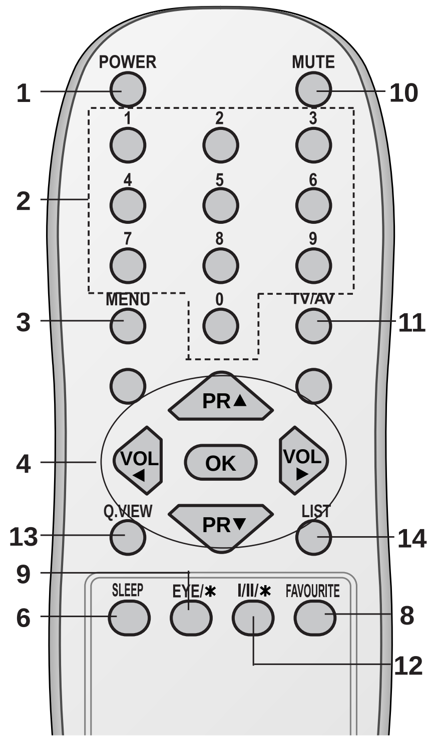
12. I/II/✱
selects the language during dual language broadcast.
selects the sound output (option).

13. Q.VIEW (or SWAP)
returns to the previously viewed programme.

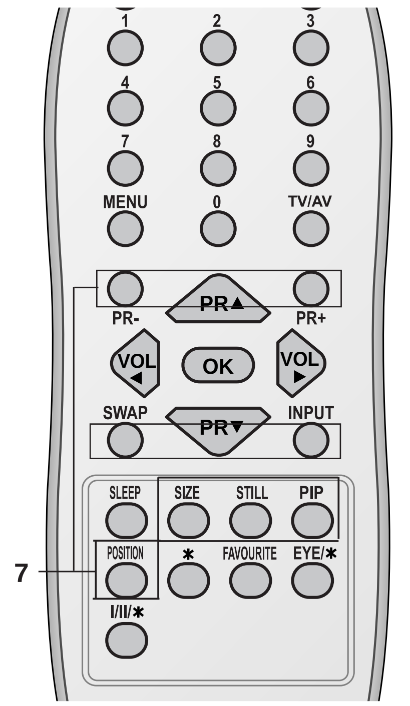
14. LIST (or INPUT)
displays the programme table.

✱ : No function

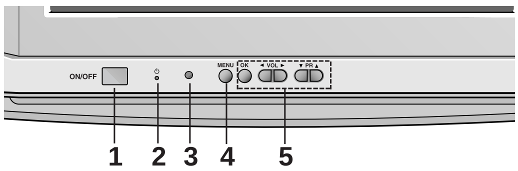
COLOURED BUTTONS : These buttons are used for teletext (only TELETEXT models) or programme edit.



(Without TELETEXT / PIP)



(With PIP / Without TELETEXT)



1. **MAIN POWER (ON/OFF)**
   switches the set on or off.

2. **POWER/STANDBY INDICATOR**
   illuminates brightly when the set is in standby mode.
   dims when the set is switched on.

3. **REMOTE CONTROL SENSOR**
   Note : *Only use the supplied remote control handset. (When you use others, they won't be able to function.)*

4. **MENU (option)**
   selects a menu.

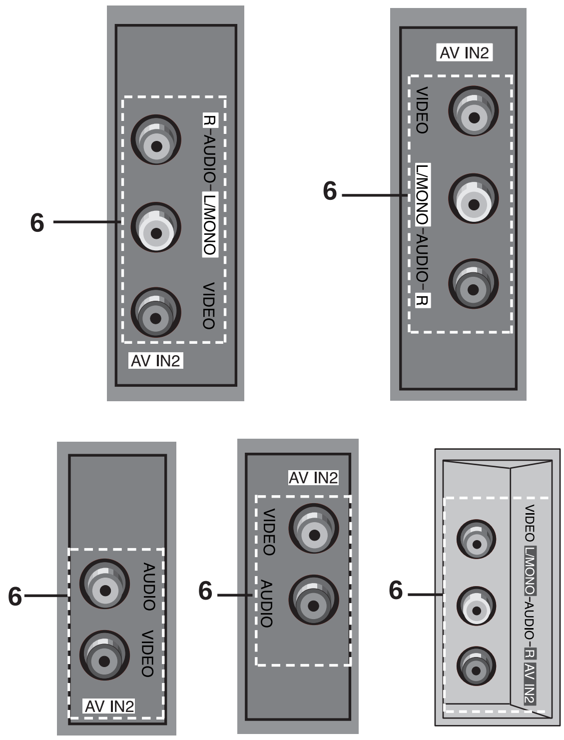
5. **OK (option)**
   accepts your selection or displays the current mode.
   ◄ / ► (Volume Up/Down) (option)
   adjusts the volume.
   adjusts menu settings.
   ▲ / ▼ (Programme Up/Down) (option)
   selects a programme or a menu item.
   switches the set on from standby.

6. **AUDIO (or AUDIO-L/R)/VIDEO IN SOCKETS (AV IN2) (option)**
   Connect the audio/video out sockets of external equipment to these sockets.

7. **EYE (option)**
   adjusts picture according to the surrounding conditions.

Note : *Shown is a simplified representation of front or side panel. What is shown here may be somewhat different from your set or can not be supplied on your area.*

Side panel



SPECIFICATIONS

Note : Specification and others are subject to change without notice for improvement.

• Scope

This specification can be applied to all the television related to CW62B Chassis.

• Test and Inspection Method

1) performance : Follow the Standard of LG TV test
2) Standards of Etc. requirement
   - Safety: IEC60065
   - EMC: EN55020,EN55013

• Test Condition

1) Temperature : 20 ± 5°C(CST : 40 ± 5°C)
2) Relative Humidity : 65 ± 10%
3) Power voltage : AC110-240V~, 50/60Hz(Middle East/Africa)
   AC 230V~50/60Hz (EU/CIS)
4) Follow each drawing or spec for spec and performance of parts,based upon P/N of B.O.M
5) Warm up TV set for more than 20min. before the measurement.

• General Specification

No	Item	Specification	Remark
1	Receiving System	PAL,SECAM BG	EU/ Non EU
		PAL/SECAM DK	
		PAL-I/I	
		NTSC M	
		NTSC 4.43(AV)	
		SECAM-L/L'	OPTION
		NTSC M/ PAL M/N	
2	Available Channel	VHF : E2 ~ E12	Non EU/ EU
		UHF : E21 ~ E69	
		CATV : S1 ~ S20	
		HYPER : S21 ~ S41	
		VHF : 02 ~ 13	NTSC-M
		UHF : 14 ~ 69	
		CATV : 02 ~ 71	
3	Input Voltage	AC 110-240V, 50/60Hz	Non EU
		AC 230V, 50/60Hz	EU
4	Market	EU,CIS, China, Asia, Africa,Middle East	
5	Screen Size	Flat 21"	
6	Tuning System	FVS 100Program	PAL 200 PR(W/O TXT)
7	Operating Environment	1) Temp : 0 ~ 45 deg	
		2) Humidity : below 85%	
8	Storage Environment	1) Temp : -20 ~ 60 deg	
		2) Humidity : below 85%	

ADJUSTMENT INSTRUCTIONS

1. Application Object

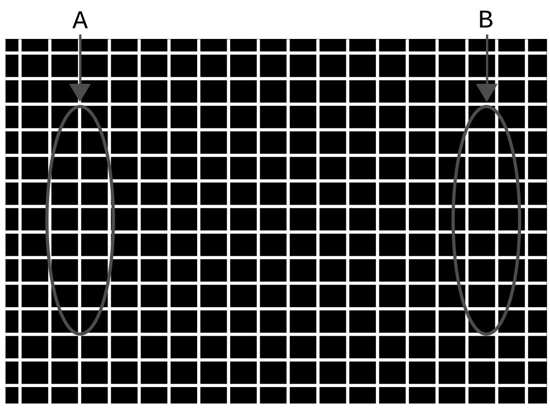
These instructions are applied to all of the color TV, CW62B.

2. Notes

(1) Because this is not a hot chassis, it is not necessary to use an isolation transformer. However, the use of isolation transformer will help protect test instrument.
(2) Adjustment must be done in the correct order.But the adjustment can be changed by consideration of mass production.
(3) The adjustment must be performed in the circumstance of 25±5°C of temperature and 65±10% of relative humidity if there is no specific designation.
(4) The input AC voltage of the receiver must keep rating voltage in adjusting.
(5) The receiver must be operated for about 20 minutes prior to the adjustment.
(6) Signal: Received, the standard color signal.(65dB±1dB uV)
LG standard signal means the digital pattern (PAL_EU 05CH,NTSC_US 13CH).

3. Focus adjustment

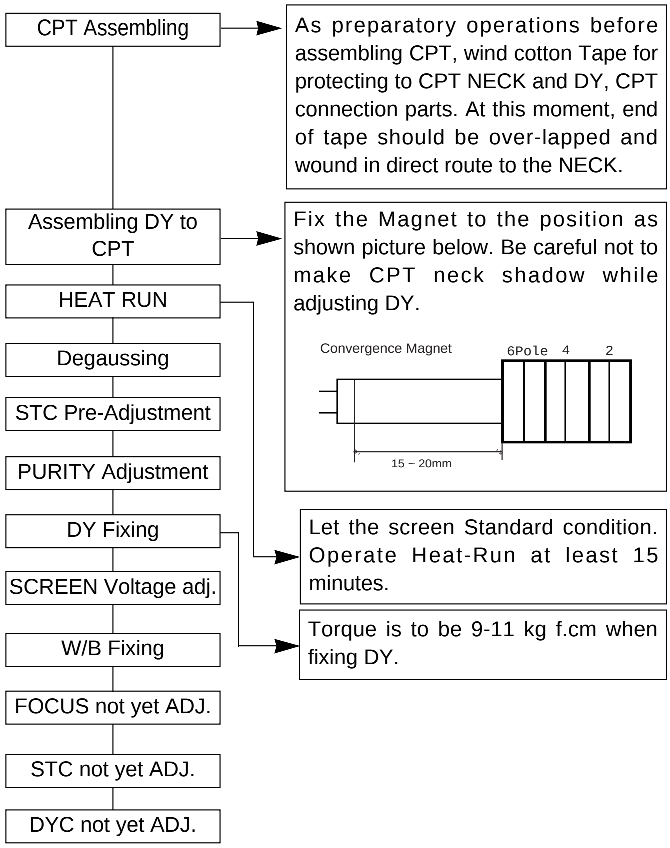
(1) Receive the Cross-Hatch Pattern(Fig 1).
(2) Set the picture condition on “DYNAMIC(CLEAR)” mode.
(3) Adjust the Focus volume of FBT,made the focus of the 1/4 part vertical line is best.



<Fig. 1> Cross-Hatch Pattern (NTSC : US 09CH, PAL : E-7CH)

4. Purity & Convergence adjustment

Adjustment should be operated when using the CPT(without ITC from CPT manufacturing place)
This adjustment must be done in the order of the following flowchart.



4.1. Color purity adjustment

(1) It makes CPT or CABINET enough to demagnetization.
(2) Receive the signal of red raster.
(3) Unfasten DY and push DY to FUNNEL direction.
(4) Make R-Land be centered as cross Purity Magnet. That time, 4 & 6 pole magnet should keep free gauss status.
(5) Make uniform RED Raster as moving DY,Check there is purity problem or not on R/G/B,white Raster. Then fix screw of DY.
(At this time, be careful about inclination and DY should be fixed keeping horizontality.)
(6) Check the TV set in direction of EAST, WEST, SOUTH, NORTH. Adjust with supporing MAGNET when adjustment is not operated.

4.2. Convergence adjustment

These adjustments should be operaed at the best condition of focus after finished purity adjustment.

(1) Receive the signal of cross hatch that BACK RASTER is black.
(2) Adjust brightness so that there are 9 ~12 dots.

(3) Widen two tabs of 4pole Magnet with equal angles and accord red,blue vertical lines at the center of screen.
(4) With keeping angle of "c.clause",rotate tab and accord red/blue,green vertical lines at the center of screen.
(5) Widen two tabs of 6pole Magnet with equal angles and accord red,bllue vertical lines at the center of screen.
(6) With keeping angle of "e.clause",repeat the adjustment from c to e keeping in mind the movement of red,blue,green when the horizontal lines are twisted.
(7) Move the DY up,down,left,right and make the convergence to be optimal condition and stick rubber wedge to CPT so that the DY not to move.

5. Screen voltage adjustment

SCREEN manual adjust method(Used the remote controller)
(1) RF Mode,input the PAL or SECAM(NTSC)singal,every channel is OK.
(2) First LINE SVC MODE(IN-START KEY) and push the ADJ KEY change to the SCREEN adjustment MODE.
(3) Adjust the SCREEN VOL of the FBT,then TV picture will be have a horizontal line,manual adjust the FBT SCREEN VOL,when the horizontal line just disappear is OK
(Press the TV/AV button to exit SVC mode)

6. White balance adjustment

(1) Receive 100% white pattern.
(2) From the initial data,adjust BLO-R(R CUT),BLO-G(G CUT) keep X,Y coordinate settle for the below list,adjust the LOW LIGHT(4.5FL).
(3) From the initial data:BG(B-DRIVE) is 32,adjust RG(R-DRIVE),GG(G-DRIVE) keep X,Y coordinate settle for the below list,adjust the HIGH LIGHT(35FL).

※HIGH LIGHT,LOW LIGHT adjust reiterative.
※W/B adjust initial data maybe difference by different model,so please refer to the model adjust TABLE.

<Table 1> White Balance Coordinate(By market)

Item	EU	N-EU
X	288	268
Y	295	273
Chroma	9000	13000

<Table 2> White Balance Initial Data

	Menu	Range	DATA	
			PAL	NTSC
LOW LIGHT	BLO-R(R CUT)	0 ~ 63	32	32
	BLO-G(G CUT)	0 ~ 63	32	32
	BLO-B(B CUT)	0 ~ 63	32	32
HIGH LIGHT	RG(R DRIVE)	0 ~ 63	32	32
	GG(G DRIVE)	0 ~ 63	32	32
	BG (B DRIVE)	0 ~ 63	32	32

<Table 3> White Balance Initial Data
1. IC PARAMETER

	Name	Maker	Algorithm			
VCD IC			0	0	0	0
EP_ROM						

2. White balance IIC Parameter(Address)

Program	Win31_wb	TWB		Win31_wb	TWB	Speed	Delay
Vcd Slave		8A	Eeprom_Slave		A0	1	30

	B(R)_Amp		B(R)_Cut		G_Amp		G_Cut	
Program	Win31_wb	TWB	Win31_wb	TWB	Win31_wb	TWB	Win31_wb	TWB
Sub Add		20		17		21		18
Start Bit		5		5		5		5
Stop Bit		0		0		0		0
Offset		0		0		0		0
Polarity		1		1		0		0
EP_Rom_S		36		33		37		34

Speed/ Plus	2	2	2	2

7. Deflection setting Data Adjustment

7.1 Adjustment preparation

(1) TV set to receive an Digital pattern(PAL:E5ch.,NTSC: US-12).
(2) Deflection data setting used remote.
(3) press the LINE SVC MODE(IN-START KEY) into SERVICE MENU,Choice SERVICE2 to adjustment mode.
(4) Press CH+,CH- KEY chooice adjust item.
(5) Press VOL+,VOL - KEY increase or decrease DATA.

7.2 Adjustment

(1) First,adjust deflection at 50Hz,of PAL signal.
then,adjust deflection at 60Hz, of NTSC signal.
(2) Korea Model only used the N60Hz,adjustment .
Adjust vertical inclination of screen.
(3) Central or South America Model first N60Hz adjustment and then N50(PAL-N) adjustment.
(4) when finish the adjustment and press"ENTER" KEY,save data andexit adjustment Mode.

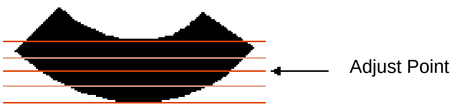
※Deflection adjustment small item

(1) V SLOPE
The cutting part(below) of picture transfer to Blanking.
Adjust the geometric vertical center of the CPT is in accord lower blanking.

(2) VS (Vertical Shift)
Adjust so that the horizontal center line of a digital circle pattern is in accord with geometric horizontal center of the CPT.

(3) VL (Vertical Linearity)
Adjust so that the boundary line between upper and lower half is in accord with geometric horizontal center of the CPT(PAL : E5ch., NTSC : US-13.).

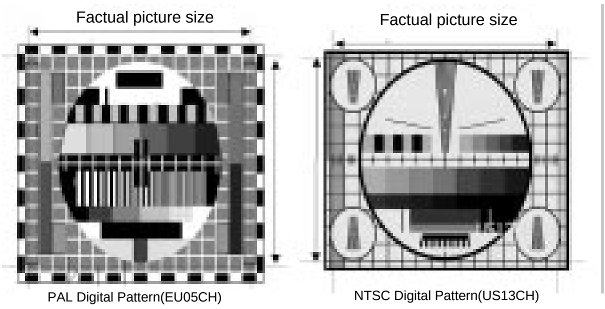
(4) VA (Vertical Amplitude)
Adjust so that the circle of a digital circle pattern may be located within the effective screen of the CPT.
※ NTSC signal : Adjust NTSC 13CH circle as an inscribed circle of vertical outer boundary of the effective screen of the CPT.



<Fig. 2 >

(5) HS (Horizontal Shift)
Adjust so that the vertical center line of a digital circle pattern is in accord with geometric vertical center of the CPT.

(6) EW (Horizontal Width)
Adjust to that a digital circle pattern looks like exact circle.(PAL:0~25%,NTSC: 2.5~3.0)

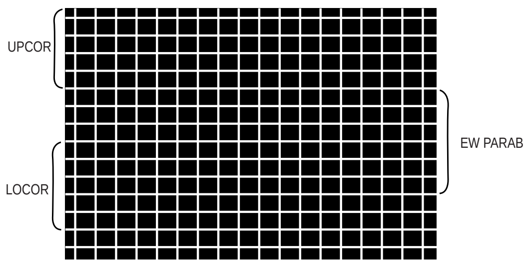


<Fig. 3> Cross-Hatch Pattern

(7) EP (East-west Parabolar)
Adjust so that middle portion of the outermost left and right vertical line looks like parallel with vertical lines of the CPT.

(8) ET (East-west Trapezium)
Adjust to make the length of top horizontal line same with it of the bottom horizontal line.

(9) EW UPCOR & EW LOCOR
Adjust until symmetrize upper&lower coner of the screen.



<Fig. 4> Cross-Hatch Pattern(NTSC:US 9CH,PAL:E-7CH)

(10) BOW
Adjust the left and right crooked line on upper and lower side.

(11) H ANGLE
Adjust the vertical slope

(12) S CORRECT (S CORRECTION)
Adjust the receive Patter, keep the lattice's range same(Top/Center/Bottom)
※ This decided by DY data,so according to the CPT's Default data(Initial data) Setting.

(13) V SCROLL
Adjust the center vertical line of the geometrical with the CPT center vertical line same.

(14) V ZOOM (fixed) : VERTICAL ZOOM.

(15) WBR (fixed) : Timing of wide Blanking

(16) WBF (fixed) : Timing of wide Blanking

(17) V SYNSLI (fixed) : Vertical slicing level

(18) OVRVOLIN (fixed) : Over voltage input mode

(19)V GUARD (fixed) : Vertical guard mode

8. initial data for deflection

<Table 4> Initial data for deflection by model (SERVICE 2)-PAL

Item	Description	21"S-SLIM		21"FLAT		Adjust or not
		50Hz	60Hz	50Hz	60Hz	
V SLOPE	Vertical slope	15	16	24	18	YES
V SHIFT	Vertical shift	48	45	48	40	YES
V LINEAR	Vertical linearity	43	44	43	33	YES
V AMPLIT	Vertical amplitude	29	31	19	44	YES
H-SHIFT	Horizontal shift	30	35	34	31	YES
EW WIDTH	EW width	46	52	46	35	YES
EW PARAB	Parabola adj	25	36	25	24	YES
EW TRAPE	Trapezoid adj	19	23	19	28	YES
EW UPCOR	Upper corner adj	35	50	35	44	YES
EW LOCOR	Lower corner adj	46	53	46	48	YES
H BOW	Bow	35	34	35	35	YES
H PARALL	Horizontal parallelogram	26	37	32	28	YES
SCORRECT	S correction	36	35	36	30	NO
V SCROLL	Vertical scroll	27	21	21	21	Adjust if need
V ZOOM	Vertical zoom	25	25	25	25	NO
WBR	Timing of wide Blanking	2	2	2	2	NO
WBF	Timing of Wide Blanking	2	2	2	2	NO
V SYNSLI	Vertical slicing level	0	0	0	0	NO
OVRVOLIN	Over voltage input mode	0	0	0	0	NO
V GUARD	Vertical guard mode	1	0	1	1	NO

- After PAL50Hz adjustment for Pal mode,NTSC60Hz apply deflection redress data,but you need confirm the adjustment condition in NTSC System again,if it is no good,you need readjust it in NTSC mode.

9. SVC DEFAULT DATA
(manage DATA by EEPROM MASTER)

[Table 5] SERVICE 1

ITEM	DESCRIPTION	CW62B	
		N-EU	EU
AGC	ACG take over	25	25
RG	Red Gain	32	32
GG	Green Gain	32	32
BG	Blue Gain	32	32
BLO-R	Black level offset Red	32	32
BLO-G	Black level offset Green	32	32
CDL	Cathode Drive Level	8	8
L-DLY PA	Luminance delay time for PAL	2	2
L-DLY SE	Luminance delay time for secam	13	13
RGB-BRI	OSD/TEXT BRIGHTNESS	27	27

[Table 6] SERVICE 3

ITEM	DESCRIPTION	CW62B		Remark
		EU	NEU	
OVMADAPT	OVER MODULATION ADAPT	1	1	
OVMTHR	OVER MODULATION THRESHOLD	1	1	
ADC LEV	ADC LEVEL(-16~15)-ADCLEV	16	16	
DEC LEV	DEC LEVEL(-16~15)-DECLEV	18	18	FM pre-scaler
MONO LEV	MONO LEVEL (-16~-15)MONLEV	18	18	(stereo L/R) FM pre-scaler
NICAMLEV	NICAM LEVEL(-16~15)-NICEV	22	22	(Mono)
FILTBW	FILTER BANDWIDTH	0	0	
BAMA FC	BAMA FC	60	60	NICAM pre-scaler
AUX3 VOL	AUX3 VOL (SCART1 RF SOUND OUT)	84	89	
FMWINDOW	FM WINDOW FILTER(FMWS)	1	1	Scart pre-scaler
BOOSTVAL	BOOSTER	0	0	
MAX VOL	MAX VOLUME	100	100	
DCXO VAL	DCXO	50	50	
DCXOA	DCXO	0	0	
TEXT-V	TEXT V POSITION	40	40	
TEXT-H	TEXT H POSITION	4	4	

[Table 7] SERVICE 4

ITEM	Description	N-EU	EU	Refer
WS	WHITE STRETCH	1	1	
BKS	BLACK STRETCH	1	1	
BSD	BLACK STRATCH DEPTH	0	0	
DSK	DYNAMIC SKIN CONTROL	1	1	
COR	VIDEO DEPENDENT CORING	2	2	
PF	PEAKING FREQUENCY DELAY	2	0	
RPO	RATION POSITIVE/ NEGATIVE PEAKS	2	2	
RPA	RATION PRE/AFTER SHOOT	2	2	
PWLDAC	PEAK WHITE LIMITER DAC	8	8	
IFOFF	IF DEMODULATIOR	37	37	
CHSE	CHROMA SENSITIVITY	1	1	
ACL	AUTO COLOR LIMITING	1	1	
CLPDEL50	Clamping delay 50	18	-	PIP data
CLPDEL60	Clamping delay 60	18	-	
CLPLEN	Clamping Pulse Length	3	-	
CLMPID	Clamping Duration	3	-	
PIP H	PIP H position	10	-	

[Table 8] option 1,2,3,4

	ITEM	Description
OPTION1	INCH	Flat/slim/ultra/Conventional
	SYSTEM	BG/DK/I/M - no EU, BG/DK/I/L - EU
	200PR	W/O TXT=>200PR,W/TXT=>100PR
	TOP	FLOF - other Nation TOP - Germany, Swiss, Austria, Italy
	ACMS	Off - Australia only/ On - other Area
	CH-AU	China & Australia Frequency table
	BOOSTER	Booster off/on
OPTION2	SOUND	RF stereo / AV stereo / Mono Dual
	PIP	PIP option
	RESERVED	Reserved option
	VOL CURVE	Eu low curve/ Non EU high Curve
	A2 STEREO	Nicam check & FM stereo/ Dual act or not
	I/II SAVE	Dual soung setting save or not
	HIDEVIAT	Sound high deviation apply
OPTION3	SCART	countermeasure or not SCART option
	DVD	DVD option
	XWAVE	FM TX option
	EYE	EYE option
	4KEY	4 Key option
	TILT	TILT option
	DEGAUSS	Degaussing option
OPTION4	OSD LANG	Refer to the next page(table.8)
	TXT LANG	Refer to the next page(table.8)
OPTION5	REMOCON	Large type Remocon / Small type Remocon
	HOTEL	HOTEL option
	TURBOSCH	Turbo search
	TURBOP/S	Turbo picture/ sound
	BLUEBACK	Blue back option
	TEXT	Teletext option

◆OPTION DATA BOM example

LEVEL	PART NO.	SPECIFICATION	DESCRIPTION
1.	3141VM382A	MAIN CHASSIS ASSY	[112.68.164.32.8]

<Table 9> OSD & TEXT LANGUAGES

1. East EU Area	OSD lang	0	ENGLISH
		1	East EU
		2	Russian
	TXT LANG	0	EU WEST
		1	EU EAST
		2	Russian W
		3	Russian E
		4	UKRAINIAN
		5	BYELORUSSI
		6	GREEK
2. Arab - Farsi	OSD lang	0	English
		1	Arabic
		2	Farsi
		3	Arab all
	TXT LANG	0	EU West
		1	EU East
		2	Arabic
		3	Farsi
3. ASIA	OSD lang		
	TXT LANG		
4. West EU	OSD lang		
	TXT LANG		

10. IN-STOP Condition

<Table 10>

No.	ITEM	Condition	Mark
1	Power	OFF	
2	Input	TV	
3	MEMORY CHANNEL	CH.MEMORY	
4	SOUND	30STEPS	
5	MUTE	OFF	
6	PSM	DYNAMIC	
7	XD	ON	
8	SSM	FLAT	
9	TURBO SOUND	FLAT	
10	AVL	OFF	
11	BALANCE	0	
12	ON/OFF TIME	OFF	
13	AUTO SLEEP	OFF	
14	CHILD LOCK	OFF	
15	DEGAUSS	OFF	
16	EYE	OFF	OPTION
17	TILT	0	OPTION
18	BLUE BACK	OFF	OPTION

<Tabel 11> PSM MODE DATA SETTING (PAL)
Picture mode DATA SETTING

PSM	Dynamic	Standard	Mild	Game
CONTRAST	100	90	60	50
BRIGHT	60	55	55	55
COLOR	60	55	55	60
SHARPNESS	60	60	50	50

<Table 12> APC MODE DATA SETTING (NTSC)
Picture mode DATA SETTING

PSM	Clear	Optimum	Soft
CONTRAST	100	70	55
BRIGHT	55	45	45
COLOR	50	45	40
SHARPNESS	50	40	30

11. OPTION Adjustment (PAL)

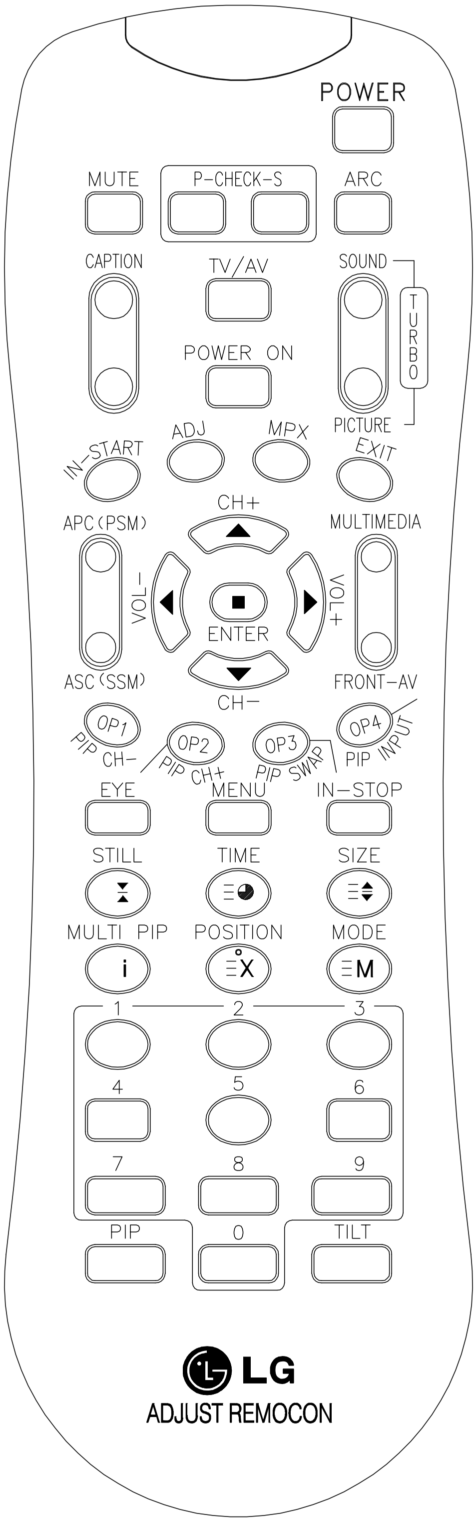
1) OPTION Adjustment need by Model name, used the remote controller press the IN-START KEY and start adjust. Choice OPTION 1,2,3,4,5 adjust one by one.
2) OPTION1 ???(0~255), OPTION2 ???(0~255), OPTION3 ???(0~250), OPTION4 ???(0~337), OPTION5 ???(0~252)

12. SOUND PRE-SCALER

This SVC data settin by every buyer's spec., so can't change it.

※Audio Out Level SPEC
- ◆ PAL B/G, D/K,I : 500m Vrms at 54% modulation ratio.
- ◆ SECAM B/G, D/K, L/L : 500m Vrms at 54% modulation ratio.
- ◆ NTSC-M : 500m Vrms at 100% modulation ratio.

SVC REMOCON

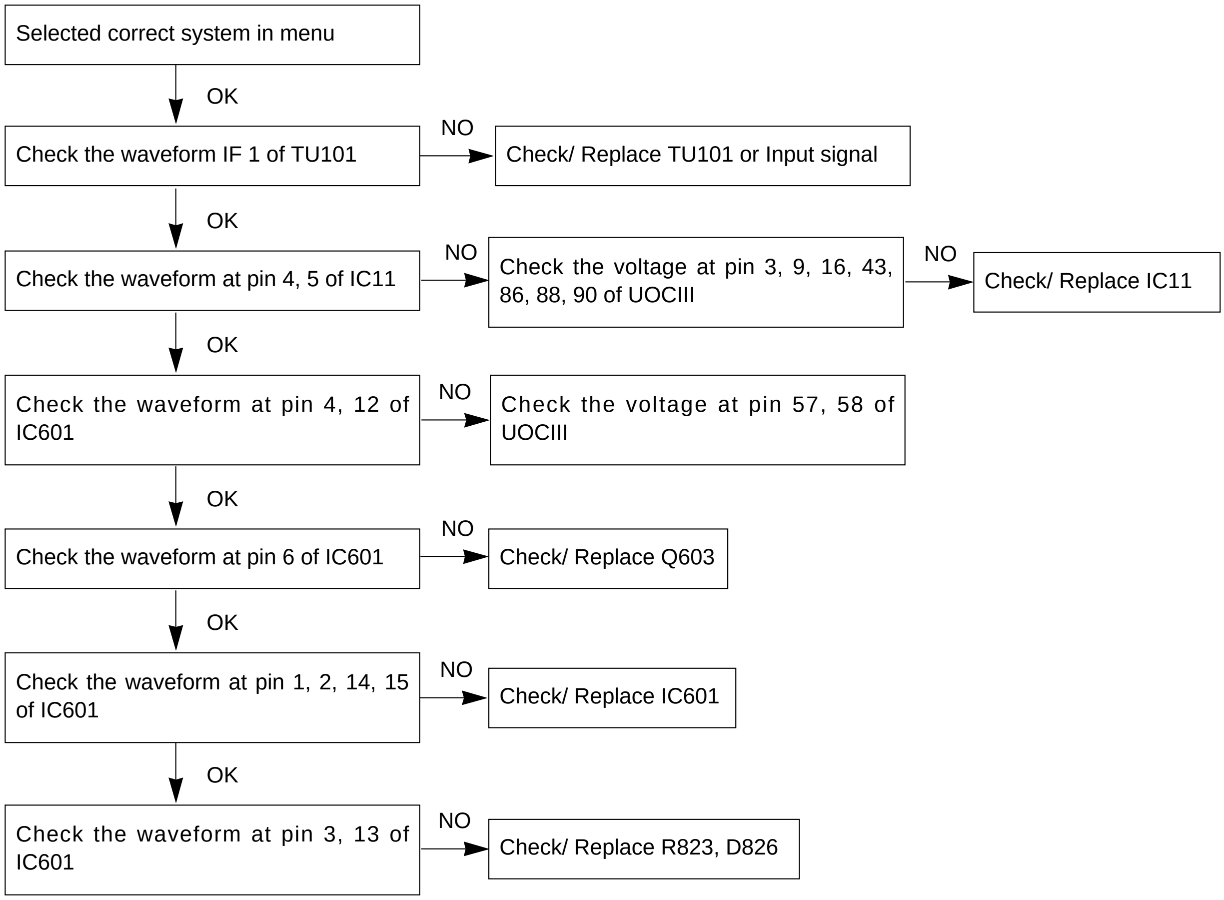


POWER
MUTE
P-CHECK-S
ARC
CAPTION
TV/AV
SOUND
TURBO
POWER ON
PICTURE
ADJ
MPX
IN-START
EXIT
CH+
APC (PSM)
MULTIMEDIA
VOL-
VOL+
ENTER
ASC (SSM)
FRONT-AV
CH-
OP1
OP2
OP3
OP4
PIP CH-
PIP CH+
PIP SWAP
PIP INPUT
EYE
MENU
IN-STOP
STILL
TIME
SIZE
MULTI PIP
POSITION
MODE
1
2
3
4
5
6
7
8
9
PIP
0
TILT
LG
ADJUST REMOCON

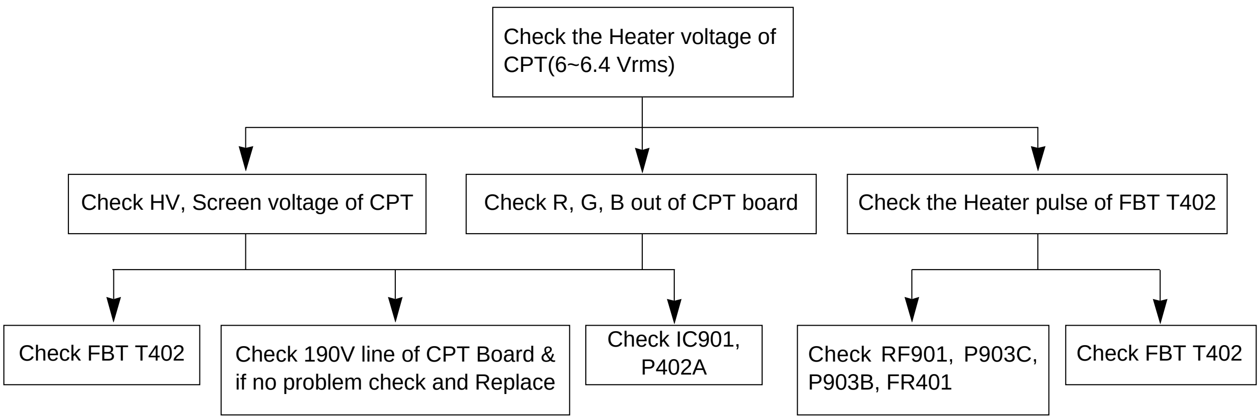
TROUBLE SHOOTING

1. RF-STEREO MODEL

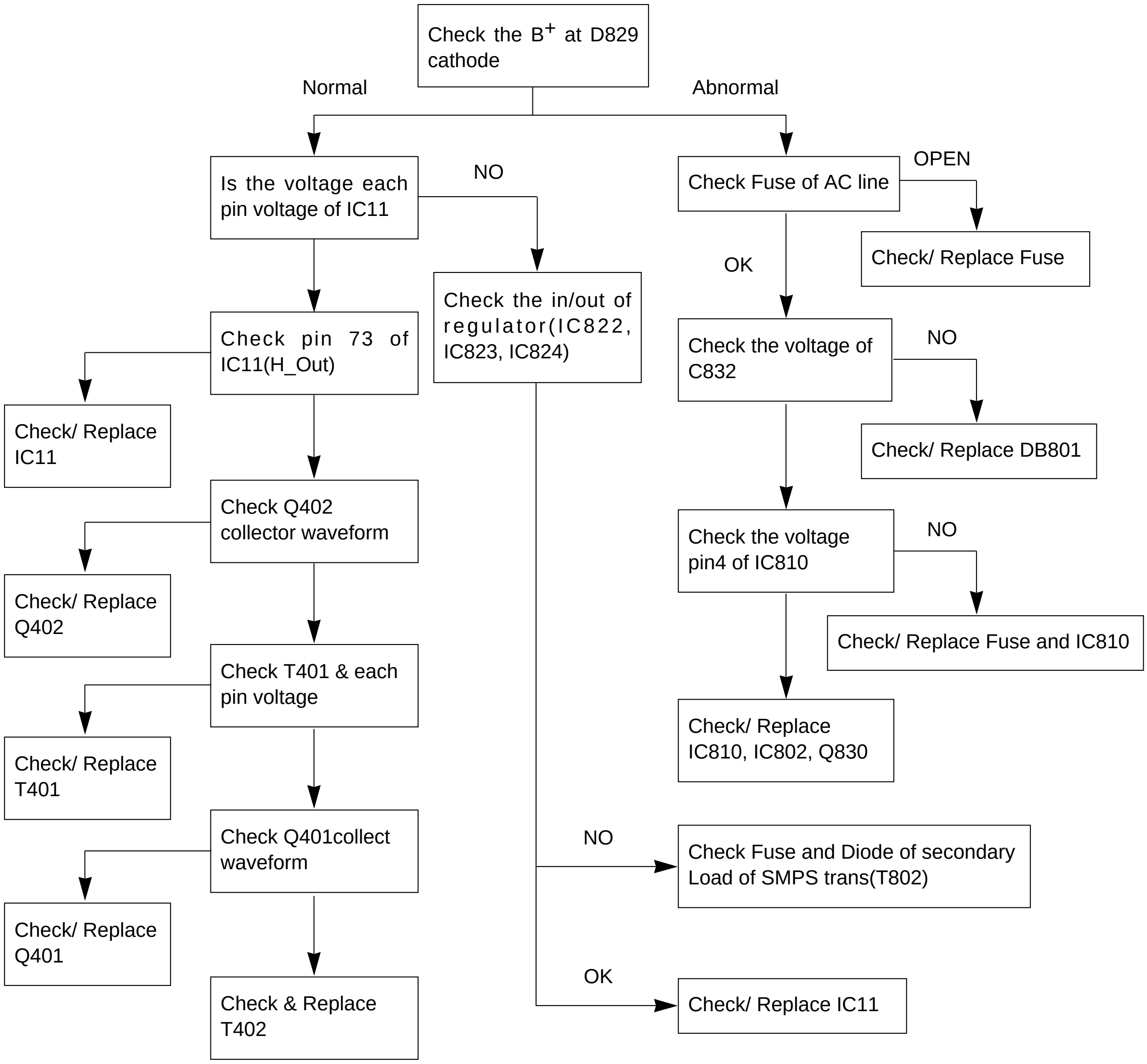
1) PICTURE OK / NO SOUND



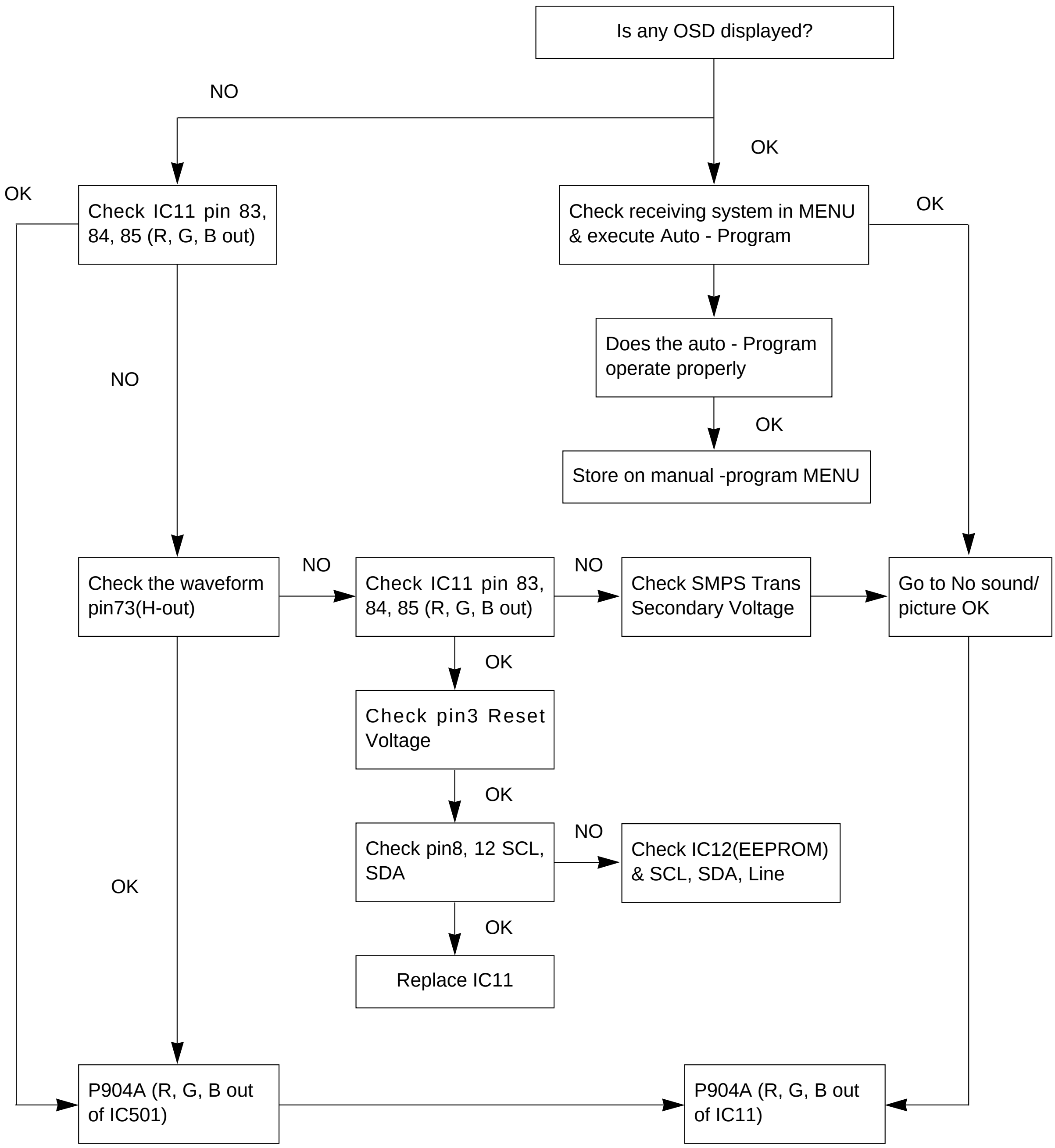
2) No Raster / Sound OK(1/2)



3) No Raster (2/2)

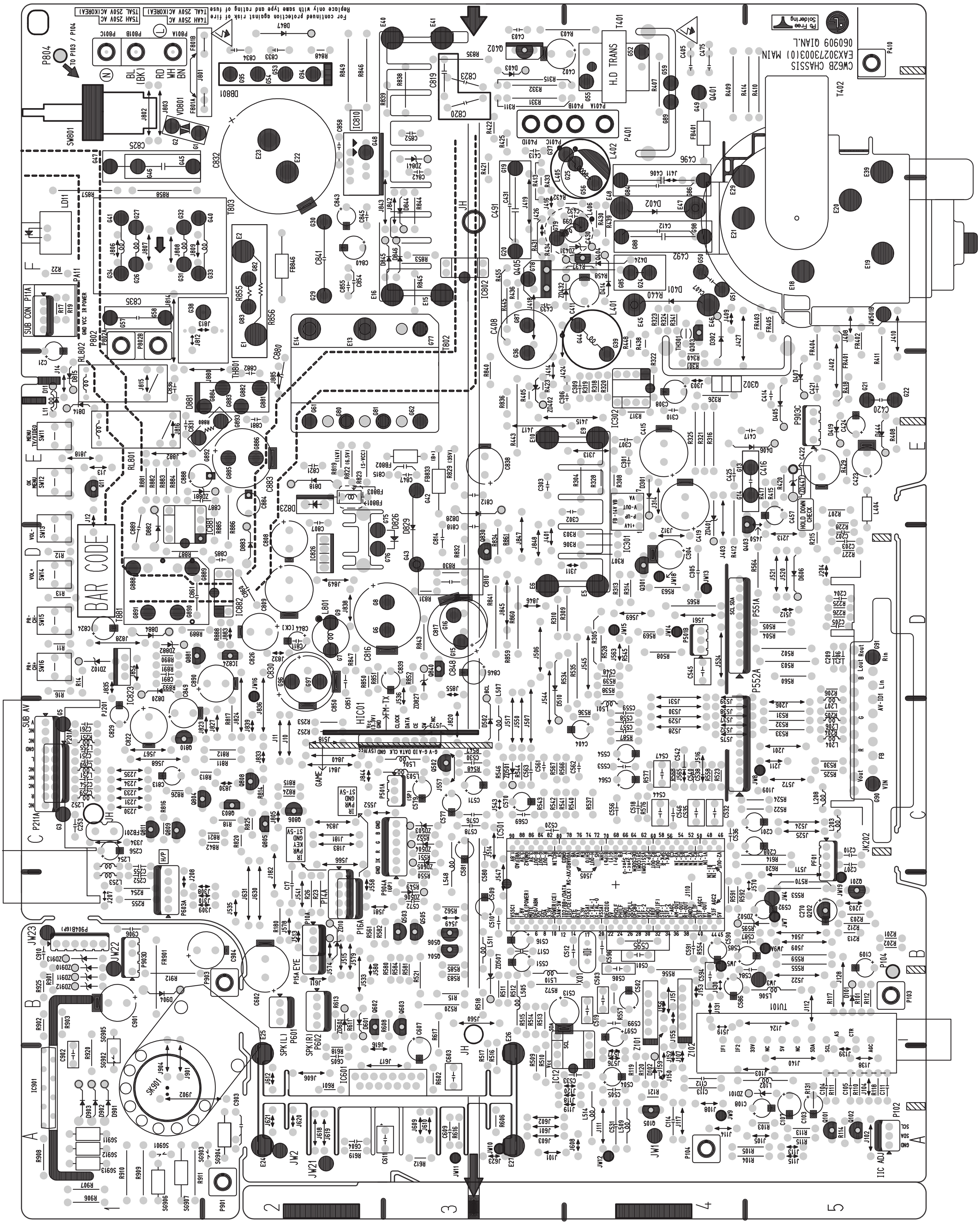


4) No Picture/ No Sound

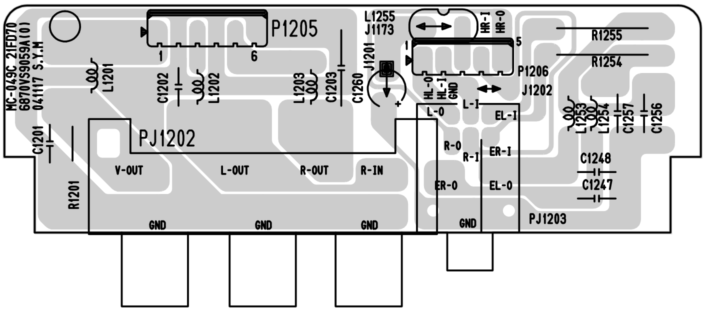


PRINTED CIRCUIT BOARD

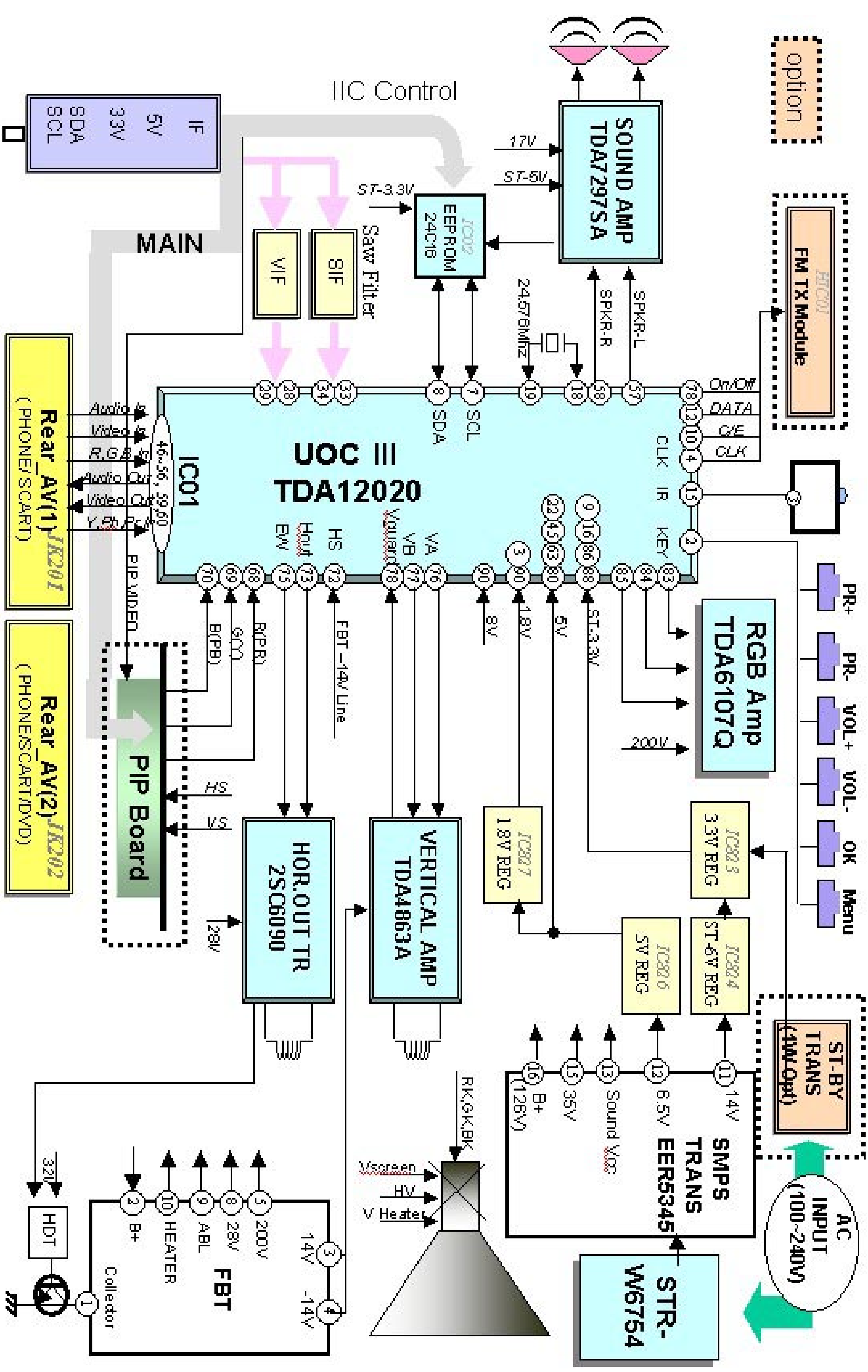
MAIN



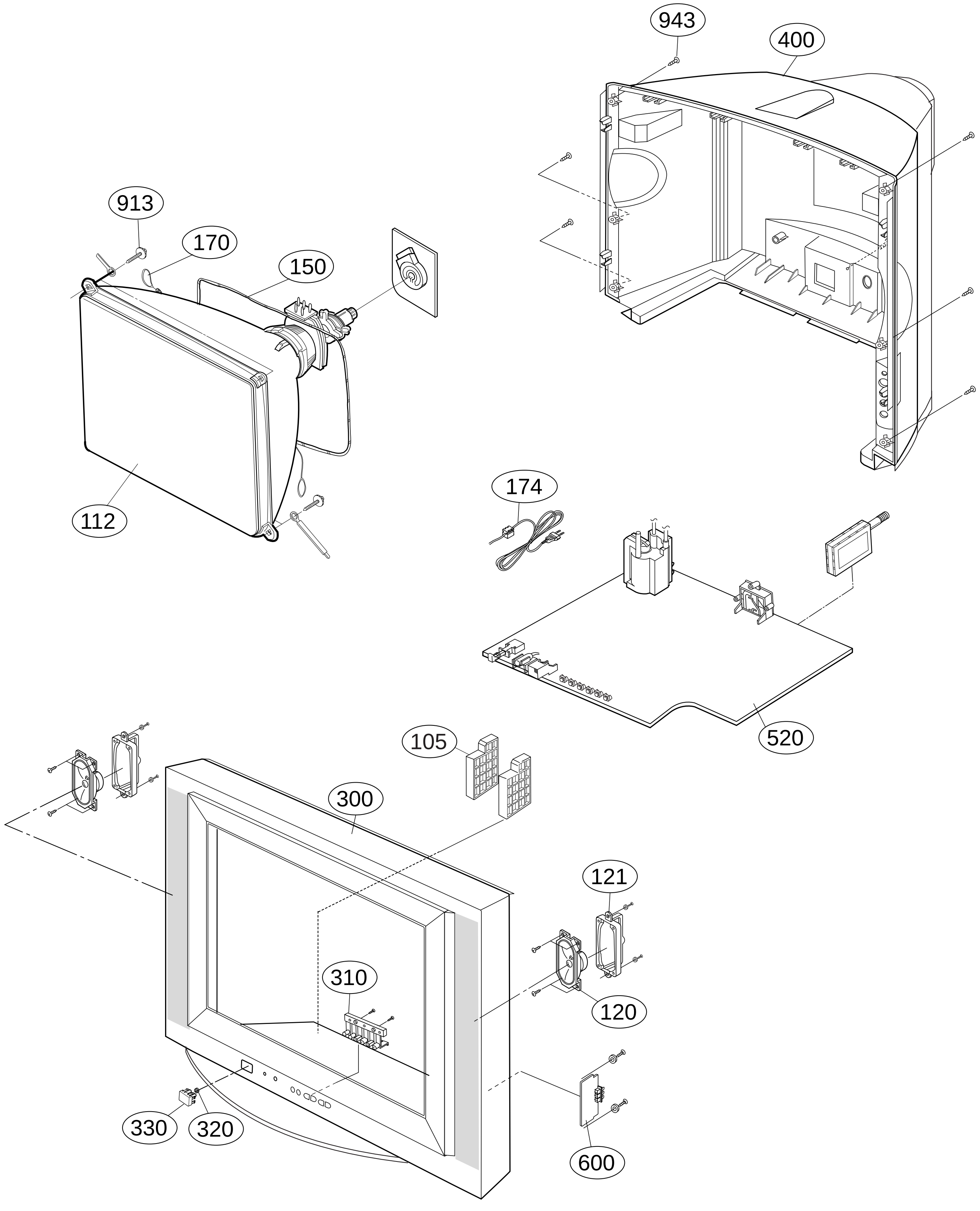
SIDE A/V


P1205
L1255
J1173
HR-I
HR-O
R1255
R1254
P1206
J1202
L1201
C1202
L1202
L1203
C1203
C1260
J1201
HL-O
HL-I
GND
L-I
L-O
EL-I
L1253
L1254
C1257
C1256
C1201
PJ1202
R-O
R-I
ER-I
C1248
C1247
V-OUT
L-OUT
R-OUT
R-IN
ER-O
EL-O
R1201
GND
PJ1203

BLOCK DIAGRAM



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

The components identified by mark ⚠ is critical for safety.
Replace only with part number specified.

LOCA. No.	PART No.	DESCRIPTIONS
105	4810900072A	MOLD HIPS CRT 21FS2 SUPER SLIM MC049C HIPS
⚠ 112	6335921002B	CPT,ITC A51ERS420X 21INCH FLAT 0.4_0.0G 4/3 16KHZ 6150Z-9221A
	6335921002A	CPT,ITC A51ERS420X 21INCH FLAT 0.5_0.0
120	EAB30823901	Speaker,Fullrange JF 24 FERRITE 7W 8OHM 82DB 170HZ 110 X 50 X 41.2
121	4810900054A	Bracket MOLD PP SPEAKER 21FC1 MC049B PP LGESY LOCAL
⚠ 150	6140VC2007N	Coil,Degaussing 11OHM AL 44T 0.6mM SQUARE 21INCH 2500mM
⚠ 170	170-A01D	Drawing,Assembly CPT EARTH UL1015 AWG22 21INCH NORMAL
	6858V21001A	Drawing,Assembly EARTH SPRING 21INCH 64T RT-21F
⚠ 174	6410VEH001E	Power Cord YP-204 ZH.B 2.41M 300MM 250V 2.5A H03VVH2-F
300	30919D0044B	Cover Assembly 21FS2 MC049C 21"" MA TOOL"
	30919D0044D	Cover Assembly CW62B 21" SY-MA #171A(1 tone) MA TOOL
	30919D0033J	Cover Assembly 21FS2RLX BRAND MC049C 197A+117
	30919D0033H	Cover Assembly 21FS2RLX BRAND MC049C 197A+117
310	5020900097B	Button MOLD ABS 380 CONTROL 21FS2 ABS, HF-380 6KEY LGEMA
	5020900067B	Button CONTROL 21FS2 LGESY LOCAL ABS,"
320	320-062H	Spring CUTTING STSC304 COIL
330	5020900098B	Button MOLD ABS HF380 POWER 21FS2 ABS, HF-380 1KEY LGEMA
	5020900066B	Button POWER 21FS2 LGESY LOCAL ABS, H"
400	3809900201C	Cover Assembly 21FS2 LGEMA CW62B 21"" SCART+SIDE 3P NO E/P"
	3809900167G	Cover Assembly 21FS2CG-TS MC059C 21" SY SET
	3809900167H	Cover Assembly 21FS2CLD-TV CW62B 21"SY LGESY-IR
520	EBR33392703	PCB Assembly, Main MAIN M.I CW62B 21FS2CLX-ZV QUHLLCP
	EBR33392708	PCB Assembly, Main MAIN M.I CW62B 21FS2CLX-ZV QUZLLCP
	EBR33392713	PCB Assembly, Main MAIN M.I CW62B 21FS2CLX-ZV QDRLLBK
	EBR33932903	PCB Assembly, Main MAIN M.I CW62B 21FX5RLX-ZV KDRLLBK
	EBR33392718	PCB Assembly,Main MAIN M.I CW62B 21FS2CLX-ZV.QDLLLCP
	EBR33392727	PCB Assembly,Main MAIN M.I CW62B 21FS2BLX-ZV.QUZLCCP
	EBR33392728	PCB Assembly,Main MAIN M.I CW62B 21FS2BLX-ZV.QUPLCCP SY-MA
	EBR33392729	PCB Assembly,Main MAIN M.I CW62B 21FS2BLX-ZV.QUHLLCP SY-MA
	EBR33392731	PCB Assembly,Main MAIN M.I CW62B 21FS2CLX-ZV.QURLCCP
	EBR33392730	PCB Assembly,Main MAIN M.I CW62B 21FS2BLX-ZV.QURLCCP SY-MA
600	EBR33412201	PCB Assembly,Sub SUB M.I CW62B 21FS2/FS4 . SIDE AV SKD/SET
	EBR33968401	PCB Assembly,Sub SUB M.I CW62B 21FS2/FS4 . SIDE AV
913	FAB30021402	Screw Assembly FAB30021402 TAPTITE P TYPE D5.0 L35.0 SAW
943	FAB30006309	Screw,Taptite 1SZZ9PB012A TH + P 4MM 16MM MSWR10 FZB

REPLACEMENT PARTS LIST

For Capacitor & Resistors, the characters at 2nd and 3rd digit in the P/No. means as follows;	CC, CX, CK, CN : Ceramic CQ : Polyester CE : Electrolytic	RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
IC		
IC12	0IAL241610B	AT24C16A-10PU-2.7 16KBIT 2KX8BIT 2.7VTO5
IC301	0IPMGPH002A	TDA4863A 9.0VTO30.0V - 3.2W - DBS ST 7P
IC302	0IKE455800E	KIA4558 36V_+-18V 6mV - - 500MW 30uV/V 2
IC601	0ILNR00189A	TDA7297SA 6TO18V 0 0.10% 15W 30W 56DB 2
IC802	0ILI817000G	LTV-817M-VB 6V 35V 35V 50MA 100NA 600 DI
IC810	0IPMGSK016B	STR-W6754 16.3TO19.9V 8.8TO10.6V SWITCHI
IC823	0IMCRAU004A	S1117-33PIC 4.8TO12V 3.3V 2W TO220 ST 3P
IC824	0IMCRKE020A	KIA78S06P 8.1TO21V 6V 600MW TO92 ST 3P
IC826	0IMCRKE018A	KIA78R05API 6TO12V 5V 1.5W TO220IS ST 4P
IC901	0IPRP00747A	TDA6107AJF 180TO210V 6mA 5.5M SIP ST 9P
Q602	0IFA754207A	KA75420ZTA(KA7542ZTA) 0.3TO15V 4.2V 200M
Q830	0IMCRFA007A	KA431AZ 2.47TO2.52V 36V 770MW TO92 TP 3P
SW	SAA30112702	3.00 5276 EUROPE FLASH ROM CW62B EAST
TRANSISTOR		
Q105	0TR102009AB	KRC102M(KRC1202) NPN 30V - 50V 100MA 500
Q11	0TR198009BA	2SA1980Y PNP -5V -50V -50V -0.15A -0.000
Q201	0TR198009BA	2SA1980Y PNP -5V -50V -50V -0.15A -0.000
Q301	0TR198009BA	2SA1980Y PNP -5V -50V -50V -0.15A -0.000
Q302	0TR205900AB	KTD2059-Y NPN 5V 100V 100V 5A 100UA 120T
Q303	0TR127409AB	KTA1274-Y PNP -5V -80V -80V -0.4A -0.000
Q401	0TRSA10005A	2SC6090LS NPN 5V 1.5KV 700V 10A 10UA 15
Q402	0TR233109AA	KSC2331Y NPN 8V 80V 60V 700MA 100NA 120T
Q404	0TR322809AB	KTC3228-Y(KTC2383) NPN 6V 160V 160V 1A 1
Q405	0TFFC00011B	FQPF11N40C-YDTU N-CHANNEL MOSFET 400V
Q502	0TR198009BA	2SA1980Y PNP -5V -50V -50V -0.15A -0.000
Q503	0TR319809AA	KTC3198(KTC1815) NPN 5V 60V 50V 150MA 10
Q504	0TR319809AA	KTC3198(KTC1815) NPN 5V 60V 50V 150MA 10
Q505	0TR127009AA	KTA1270-Y(KTA562TM) PNP -5V -35V -30V -0
Q506	0TR127009AA	KTA1270-Y(KTA562TM) PNP -5V -35V -30V -0
Q603	0TR534309AA	2SC5343Y NPN 5V 60V 50V 150MA 100NA 120T
Q803	0TR102009AB	KRC102M(KRC1202) NPN 30V - 50V 100MA 500
Q804	0TR534309AA	2SC5343Y NPN 5V 60V 50V 150MA 100NA 120T
Q805	0TR102009AB	KRC102M(KRC1202) NPN 30V - 50V 100MA 500
Q806	0TR127409AB	KTA1274-Y PNP -5V -80V -80V -0.4A -0.000
Q809	0TR319809AA	KTC3198(KTC1815) NPN 5V 60V 50V 150MA 10
Q810	0TR319809AA	KTC3198(KTC1815) NPN 5V 60V 50V 150MA 10
Q811	0TR534309AA	2SC5343Y NPN 5V 60V 50V 150MA 100NA 120T
Q840	0TR421009CA	BF421 PNP -5V -0.3KV -0.3KV -0.05A -0.00
DIODE		
D101	0DS141489AB	1N4148 1V 100V 150MA 500MA 4NSEC 500MW
D102	0DSVH00019A	BA282 1V 35V 100MA 350A 1SEC 350W DO35 T
D11	0DS141489AB	1N4148 1V 100V 150MA 500MA 4NSEC 500MW
D301	0DRDC00014M	1N4005 600V 1.1V 5UA 30A 1.5USEC DO41 TA
D302	0DS141489AB	1N4148 1V 100V 150MA 500MA 4NSEC 500MW
D401	0DRDC00014G	RU4AM 600V 1.3V 10UA 70A 100NSEC DO27 BK
D402	EAH30754301	RU4DS 1.8V 1.3KV 1.5A 50A 400NSEC 0W AXI
D403	0DS141489AB	1N4148 1V 100V 150MA 500MA 4NSEC 500MW
D405	0DRDC00014D	RGP15J 600V 1300MV 5UA 50A 250NSEC DO15
D406	0DRDC00014D	RGP15J 600V 1300MV 5UA 50A 250NSEC DO15
D407	0DR060009AA	TVR06J 600V 1300MV 5UA 25A 250NSEC DO41
D414	0DRDC00014D	RGP15J 600V 1300MV 5UA 50A 250NSEC DO15
D444	0DR060009AA	TVR06J 600V 1300MV 5UA 25A 250NSEC DO41
D606	0DS141489AB	1N4148 1V 100V 150MA 500MA 4NSEC 500MW
D815	0DS141489AB	1N4148 1V 100V 150MA 500MA 4NSEC 500MW
D818	0DR060009AA	TVR06J 600V 1300MV 5UA 25A 250NSEC DO41
D820	0DR060009AA	TVR06J 600V 1300MV 5UA 25A 250NSEC DO41
D823	EAH30560501	SFAF504G 200V 975MV 10UA 125A 35NSEC ITO
D826	0DRTW00141A	SFAF504G 200V 975MV 10UA 125A 35NSEC ITO
D828	0DR060009AA	TVR06J 600V 1300MV 5UA 25A 250NSEC DO41
D829	0DRDC00014F	RU3AM 600V 1100MV 10UA 50A 90NSEC DO15L
D844	0DRDC00014J	EU1Z 200V 2.5V 10UA 15A 50NSEC DO41 TA52
D845	0DRDC00014Q	EU1ZS 200V 2.5V 10UA 15A 120NSEC DO41 TA
D846	0DRDC00014J	EU1Z 200V 2.5V 10UA 15A 50NSEC DO41 TA52
D847	0DR060009AA	TVR06J 600V 1300MV 5UA 25A 250NSEC DO41
D901	0DR060009AA	TVR06J 600V 1300MV 5UA 25A 250NSEC DO41
D902	0DR060009AA	TVR06J 600V 1300MV 5UA 25A 250NSEC DO41
D903	0DR060009AA	TVR06J 600V 1300MV 5UA 25A 250NSEC DO41
D904	0DRDC00014E	1N4004A 400V 1100MV 5UA 30A - DO41 TP 2P
DB801	0DRTW00071A	TS4B05G-1021 600V 1V 5UA 120A TS4B ST 4P
ZD101	0DZ330009DG	GDZJ33B 33V 30.32TO31.88V 65OHM 500MW
ZD102	0DZ910009BD	GDZJ9.1B . 9.1V 8.57TO9.01V 25OHM 500MW
ZD401	0DZ510009BF	GDZ5.1B 5.1V 4.94TO5.2V 20OHM 500MW DO34
ZD431	0DZ470009EF	GDZJ4.7B 4.7V 4.55TO4.8V 90OHM 500MW DO3
ZD432	0DZ120009BG	GDZJ12B 12V 11.44TO12.03V 30OHM 500MW D
ZD501	0DZ510009AK	GDZJ5.1B 5.1V 4.94TO5.2V 80OHM 500MW DO3
ZD502	0DZ820009BF	GDZJ8.2B 8.2V 7.78TO8.19V 20OHM 500MW DO
ZD503	0DZ910009BD	GDZJ9.1B . 9.1V 8.57TO9.01V 25OHM 500MW
ZD504	0DZ910009BD	GDZJ9.1B . 9.1V 8.57TO9.01V 25OHM 500MW
ZD505	0DZ910009BD	GDZJ9.1B . 9.1V 8.57TO9.01V 25OHM 500MW
ZD506	0DZ910009BD	GDZJ9.1B . 9.1V 8.57TO9.01V 25OHM 500MW
ZD507	0DZ910009BD	GDZJ9.1B . 9.1V 8.57TO9.01V 25OHM 500MW
ZD601	0DZ820009BF	GDZJ8.2B 8.2V 7.78TO8.19V 20OHM 500MW DO
ZD827	0DZ750009BE	GDZJ7.5B 7.5V 7.07TO7.45V 20OHM 500MW DO
ZD841	0DZ620009AH	MTZJ6.2A 6.2V 5.78TO6.09V 30OHM 500MW DO
ZD910	0DZ510009BF	GDZ5.1B 5.1V 4.94TO5.2V 20OHM 500MW DO34
ZD911	0DZ510009BF	GDZ5.1B 5.1V 4.94TO5.2V 20OHM 500MW DO34
ZD912	0DZ510009BF	GDZ5.1B 5.1V 4.94TO5.2V 20OHM 500MW DO34
CAPACITOR		
C103	0CE475DK618	EGR475M050T1G1C11G 4.7uF 20% 50V 50MA
C107	0CE227DD618	EGR227M010T1G1E11G 220uF 20% 10V 255MA
C108	0CE475DK618	EGR475M050T1G1C11G 4.7uF 20% 50V 50MA
C109	0CE226DK618	SMS5.0TP50VB22M 22uF 20% 50V 108MA
C111	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V

For Capacitor & Resistors, the characters at 2nd and 3rd digit in the P/No. means as follows;	CC, CX, CK, CN : Ceramic CQ : Polyester CE : Electrolytic	RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
C112	0CN1030F679	RH EP050 Y103M-B-B 10nF 20% 16V X5R -25T
C113	0CN1030F679	RH EP050 Y103M-B-B 10nF 20% 16V X5R -25T
C114	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C1202	0CN1010K519	RH UP050 B101K-B-B 100pF 10% 50V Y5P -25
C1203	0CN1010K519	RH UP050 B101K-B-B 100pF 10% 50V Y5P -25
C17	0CN1030F679	RH EP050 Y103M-B-B 10nF 20% 16V X5R -25T
C201	0CE226DF618	EGR226M016T1G1C11G 22uF 20% 16V 75MA -
C202	0CN4710K519	RH UP050 B471K-B-B 470pF 10% 50V Y5P -25
C203	0CN1010K519	RH UP050 B101K-B-B 100pF 10% 50V Y5P -25
C204	0CN4710K519	RH UP050 B471K-B-B 470pF 10% 50V Y5P -25
C205	0CN1010K519	RH UP050 B101K-B-B 100pF 10% 50V Y5P -25
C206	0CN1010K519	RH UP050 B101K-B-B 100pF 10% 50V Y5P -25
C207	0CN4710K519	RH UP050 B471K-B-B 470pF 10% 50V Y5P -25
C208	0CE226DF618	EGR226M016T1G1C11G 22uF 20% 16V 75MA -
C209	0CN4710K519	RH UP050 B471K-B-B 470pF 10% 50V Y5P -25
C21	0CE107DD618	SMS5.0TP10VB100M 100uF 20% 10V 157MA -40
C210	0CN4710K519	RH UP050 B471K-B-B 470pF 10% 50V Y5P -25
C270	0CE227DD618	EGR227M010T1G1E11G 220uF 20% 10V 255MA
C303	0CQ1041N409	310M 2A 104 J 100nF 5% 100V PE -40TO+85C
C304	0CE107DK618	EGR107M050T6G1G11G 100uF 20% 50V 270MA
C306	0CQ3331N509	PEI333K2AT 33nF 10% 100V PE -40TO+85C IN
C308	0CE476DK618	SMS5.0TP50VB47M 47uF 20% 50V 181MA
C309	0CN4710K519	RH UP050 B471K-B-B 470pF 10% 50V Y5P -25
C310	0CQ1031N509	PEI103K2AT 10nF 10% 100V PE -40TO+85C IN
C402	0CE475DK618	EGR475M050T1G1C11G 4.7uF 20% 50V 50MA -4
C403	0CQ1521N509	PEI152K2AT 1.5nF 10% 100V PE -40TO+85C I
C404	0CE106DF618	SMS5. 0TP16VB10M 10uF 20% 16V 72MA -40TO
C405	181-091Y	LRYM28681KXA 680pF 10% 2000V Y5R -25TO+1
C407	181-009S	PPN273K2DH 27nF 10% 200V PP -40TO+85C
C408	0CE685BK652	KM5.0MC50VBBP-S6.8M 6.8uF 20% 50V 44MA -
C411	0CE105BR618	ESM105M250T1G5E11G 1uF 20% 250V 15MA -
C413	0CK2220W515	DCM222K34Y5PL6FJ5A 2.2nF 10% 500V Y5P -2
C414	181-091C	DEHR33A471KN2A 470pF 10% 1000V Y5R
C415	0CE108DH618	SMS5.0TP25VB1000M 1000uF 20% 25V 1.34A
C416	181-009R	PPN223K2DH 22nF 10% 200V PP -40TO+85C
C417	0CK2710W515	DCM271K20Y5PL6FJ5A 270pF 10% 500V Y5P
C419	0CE108DH618	SMS5.0TP25VB1000M 1000uF 20% 25V 1.34A -
C420	181-009R	PPN223K2DH 22nF 10% 200V PP -40TO+85C
C421	0CK2710W515	DCM271K20Y5PL6FJ5A 270pF 10% 500V Y5P
C422	0CE475DR618	EGR475M250T1G1G11G 4.7uF 20% 250V 70MA
C423	0CE107DJ618	SMS5.0TP35VB100M 100uF 20% 35V 291MA -40
C430	0CE106BK618	ESM106M050T1G5C11G 10uF 20% 50V 55MA
C432	181-091Q	LRYM5471KHA 470pF 10% 1000V Y5R -25TO+12
C433	0CQ1021N509	PEI102K2AT 1nF 10% 100V PE -40TO+85C IND
C491	0CF1241Y460	0.12UF D 630V 5% M/PP 85C BULK
C492	0CF2741U460	0.27UF D 400V 5% M/PP 85C BULK
C496	181-834B	BUP16X183JHES01 18nF 5% 1.6KV MPP -25TO+
C501	0CF2241L438	PCMT 365 76224 220nF 5% 63V MPE -40TO+85
C502	0CE225DK618	EGR225M050T1G1C11G 2.2uF 20% 50V 20MA
C503	0CQ6821N509	PEI682K2AT 6.8nF 10% 100V PE -40TO+85C I
C504	0CE107DD618	SMS5.0TP10VB100M 100uF 20% 10V 157MA -40
C505	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V

LOCA. NO	PART NO	DESCRIPTION
C506	0CQ1031N509	PEI103K2AT 10nF 10% 100V PE -40TO+85C IN
C509	0CE106DF618	SMS5. 0TP16VB10M 10uF 20% 16V 72MA
C510	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C512	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C513	0CE337DD618	SMS5.0TP10VB330M 330uF 20% 10V 386MA
C516	0CE226DD618	EGR226M010T1G1C11G 22uF 20% 10V 75MA
C519	181-007F	ECQ-V1H224JL3(TR) 220nF 5% 50V MPE -40TO
C520	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C530	0CN2220F569	RH EP050 X222K-B-B 2.2nF 10% 16V X7R -25
C531	0CN2230H949	RH TP050 F223Z-B-B 22nF -20TO+80% 25V Y5
C532	0CF4741L438	PCMT 365 76474 470nF 5% 63V MPE -40TO+85
C533	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C535	0CF4741L438	PCMT 365 76474 470nF 5% 63V MPE -40TO+85
C536	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C538	0CN1030F679	RH EP050 Y103M-B-B 10nF 20% 16V X5R -25T
C540	0CN1030F679	RH EP050 Y103M-B-B 10nF 20% 16V X5R -25T
C544	0CF4741L438	PCMT 365 76474 470nF 5% 63V MPE -40TO+85
C546	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C547	0CF4741L438	PCMT 365 76474 470nF 5% 63V MPE -40TO+85
C548	0CN2220F569	RH EP050 X222K-B-B 2.2nF 10% 16V X7R -25
C551	0CE226DD618	EGR226M010T1G1C11G 22uF 20% 10V 75MA
C553	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C554	0CE107DD618	SMS5.0TP10VB100M 100uF 20% 10V 157MA -40
C556	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C557	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C558	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C559	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C561	0CQ3931N509	PEI393K2AT 39nF 10% 100V PE -40TO+85C IN
C562	0CQ3931N509	PEI393K2AT 39nF 10% 100V PE -40TO+85C IN
C563	0CN1010K519	RH UP050 B101K-B-B 100pF 10% 50V Y5P -25
C564	0CE106DK618	SMS5.0TP50VB10M 10uF 20% 50V 72MA
C569	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C570	0CE107DF618	EGR107M016T1G1C11G 100uF 20% 16V 160MA
C571	0CE336DD618	EGR336M010T1G1C11G 33uF 20% 10V 85MA
C572	0CN4710K519	RH UP050 B471K-B-B 470pF 10% 50V Y5P -25
C576	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C577	0CE106DF618	SMS5. 0TP16VB10M 10uF 20% 16V 72MA -40TO
C578	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C579	0CE106DF618	SMS5. 0TP16VB10M 10uF 20% 16V 72MA -40TO
C580	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C581	0CE107DD618	SMS5.0TP10VB100M 100uF 20% 10V 157MA
C584	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C585	0CE225DK618	EGR225M050T1G1C11G 2.2uF 20% 50V 20MA
C586	0CE225DK618	EGR225M050T1G1C11G 2.2uF 20% 50V 20MA
C587	0CN1030F679	RH EP050 Y103M-B-B 10nF 20% 16V X5R -25T
C590	0CE225DK618	EGR225M050T1G1C11G 2.2uF 20% 50V 20MA
C591	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C592	0CE107DD618	SMS5.0TP10VB100M 100uF 20% 10V 157MA
C595	181-301C	NPP100V154J10F 150nF 5% 100V PP -40TO
C596	0CN1040K949	CH UP050 F104Z-B-B Z 100nF -20TO+80% 50V
C597	0CE106DF618	SMS5. 0TP16VB10M 10uF 20% 16V 72MA
C599	0CN2230H949	RH TP050 F223Z-B-B 22nF -20TO+80% 25V

For Capacitor & Resistors, the characters at 2nd and 3rd digit in the P/No. means as follows;	CC, CX, CK, CN : Ceramic CQ : Polyester CE : Electrolytic	RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
C602	0CE108DH618	SMS5.0TP25VB1000M 1000uF 20% 25V 1.34A -
C603	0CF2241L438	PCMT 365 76224 220nF 5% 63V MPE -40TO+85
C604	0CN6810K519	RH UP050 B681K-B-B 680pF 10% 50V Y5P -25
C605	0CN1030F679	RH EP050 Y103M-B-B 10nF 20% 16V X5R -25T
C607	0CE476DH618	SMS5.0TP25VB47M 47uF 20% 25V 131MA
C609	0CN6810K519	RH UP050 B681K-B-B 680pF 10% 50V Y5P -25
C611	0CF2241L438	PCMT 365 76224 220nF 5% 63V MPE -40TO+85
C807	181-091Q	LRYM5471KHA 470pF 10% 1000V Y5R -25TO+12
C808	0CE477DH618	EGR477M025T1G1H15G 470uF 20% 25V 640MA
C809	0CE228BF618	ESM228M016T1G5K25G 2200uF 20% 16V
C812	0CK47101515	DCH471K26Y5PN6FJ5A 470pF 10% 1000V Y5P -
C813	0CE476DD618	EGR476M010T1G1C11G 47uF 20% 10V 105MA -
C814	181-091W	LRYM27471KX1A 470pF 10% 2000V Y5R -25TO
C816	0CE227DP61A	EGR227M160T1G1M32G 220uF 20% 160V 8
C818	0CQ2231N509	PEI223K2AT 22nF 10% 100V PE -40TO+85C IN
C822	0CE108DD618	SMS5.0TP10VB1000M 1000uF 20% 10V 854MA -
C823	181-120K	SDE222M16FS1 2.2nF 20% 4000V Y5U -25TO+8
C825	0CQZVBK002C	PCX2 335 91592 0.22uF 10% 275V MPP -40TO
C826	0CE108DD618	SMS5.0TP10VB1000M 1000uF 20% 10V 854MA
C829	0CE476DD618	EGR476M010T1G1C11G 47uF 20% 10V 105MA
C830	0CE228DH61A	EGR228M025T1G1L25G 2200uF 20% 25V 1.45A
C832	0CE337KV6A0	LTW337M450S1A5S45G 330uF 20% 4
	181-001V	LTW227M450S1A5S40G 220uF 20% 450V 1.53A
C833	0CK10202515	DCH102K39Y5PP7FJ5A 1nF 10% 2000V Y5P -25
C834	0CK10202515	DCH102K39Y5PP7FJ5A 1nF 10% 2000V Y5P -25
C835	0CQZVBK002A	PCX2 335 M9729 0.1uF 20% 275V MPP -40TO
C836	0CK4710W515	DCM471K20Y5PL6FJ5A 470pF 10% 500V Y5P
C838	0CE227BK618	ESM227M050T1G5H17G 220uF 20% 50V 400MA
C839	0CE106DH618	SMS5.0TP25VB10M 10uF 20% 25V 72MA
C840	0CE226BK618	ESM226M050T1G5C11G 22uF 20% 50V 85MA
C841	181-011B	MPPS102J3VD 1nF 5% 1.6KV MPP -40TO+85C N
C842	0CK1520K515	DCT152K22Y5PF6FJ5A 1.5nF 10% 50V Y5P -25
C843	0CE105DK618	EGR105M050T1G1C11G 1uF 20% 50V 10MA
C844	0CK1020K515	DCT102K20Y5PF6FJ5A 1nF 10% 50V Y5P -25TO
C845	0CK8210K515	DCT821K20Y5PF6FJ5A 820pF 10% 50V Y5P -25
C846	0CE107DD618	SMS5.0TP10VB100M 100uF 20% 10V 157MA -40
C848	0CE107CP618	SHL5.0TP160VB100M 100uF 20% 160V 541MA
C849	0CE477DD618	EGR477M010T6G1G11G 470uF 20% 10V 425MA
C851	0CN1020K519	RH UP050 B102K-B-B 1nF 10% 50V Y5P -25TO
C852	181-007C	ECQV1H104JL3 100nF 5% 50V MPE -40TO+85C
C901	0CE475DR618	EGR475M250T1G1G11G 4.7uF 20% 250V 70MA
C903	181-033S	DCH122K39Y5PP7VK7A 1.2nF 10% 2000V Y5P -
C904	0CE475DR618	EGR475M250T1G1G11G 4.7uF 20% 250V 70MA
C906	0CN1030F679	RH EP050 Y103M-B-B 10nF 20% 16V X5R -25T
C908	0CH3104P56C	C4532X7R2J104KT 100nF 10% 630V X7R -55TO
C910	0CN5610K519	RH UP050 B561K-B-B 560pF 10% 50V Y5P -25
J565	0CN1030F679	RH EP050 Y103M-B-B 10nF 20% 16V X5R -25T

COIL & INDUCTOR

LOCA. NO	PART NO	DESCRIPTION
J549	0LA0121K119	LAL02TB1R2K 1.2UH 10% 0V 260MA 900MOHM
J578	0LA0102K119	LAL02TB100K 10UH 10% 0V 160MA 2.5OHM 24
L102	0LA0102K139	Inductor, wire wound LAL04TB100K 10UH
L1202	0LA0102K119	Inductor, wire wound LAL02TB100K 10UH 10%
L1203	0LA0102K119	Inductor, wire wound LAL02TB100K 10UH 10%
L204	0LA0102K119	Inductor, wire wound LAL02TB100K 10UH 10%
L206	0LA0102K119	Inductor, wire wound LAL02TB100K 10UH 10%
L207	0LA0102K119	Inductor, wire wound LAL02TB100K 10UH 10%
L401	150-717J	Coil ,Choke RN-29FB50 560uH 50V 0A
L402	6140VY0020C	Coil,Linearity JS-E016 24uH - - 18X31MM LEAD
L501	0LA0121K119	Inductor, wire wound LAL02TB1R2K 1.2UH 10%
L503	0LA0121K119	Inductor, wire wound LAL02TB1R2K 1.2UH 10%
L504	0LA0121K119	Inductor, wire wound LAL02TB1R2K 1.2UH 10%
L505	0LA0121K119	Inductor, wire wound LAL02TB1R2K 1.2UH 10%
L506	0LA0121K119	Inductor, wire wound LAL02TB1R2K 1.2UH 10%
L507	0LA0121K119	Inductor, wire wound LAL02TB1R2K 1.2UH 10%
L509	0LA0102K119	Inductor, wire wound LAL02TB100K 10UH 10%
L511	0LA0121K119	Inductor, wire wound LAL02TB1R2K 1.2UH 10%
L514	0LA0121K119	Inductor, wire wound LAL02TB1R2K 1.2UH 10%
L548	0LA0121K119	Inductor, wire wound LAL02TB1R2K 1.2UH 10%
L801	150-C02E	Coil ,Choke 50uH 50V 0A 12X17MM LEAD
T401	151-C02M	Transformer,Linear EI19 10V 100V 200MH 1A
T402	6174V-5003R	Transformer,FBT BSC25-N1537 - 110V - - 29KV
T802	61709MC017C	Transformer,Switching EER4215 270UH B+110V

CONNECTOR

LOCA. NO	PART NO	DESCRIPTION
G1	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G13	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G14	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G19	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G2	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G20	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G21	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G22	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G24	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G26	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G27	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G29	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G30	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G31	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G32	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G36	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G37	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G38	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G39	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G42	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G43	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G44	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G45	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G47	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G48	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G49	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G50	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G51	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G52	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0

For Capacitor & Resistors, the characters at 2nd and 3rd digit in the P/No. means as follows;	CC, CX, CK, CN : Ceramic CQ : Polyester CE : Electrolytic	RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
G53	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G54	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G55	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G56	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G57	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G58	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G59	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G6	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G61	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G62	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G7	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G75	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G76	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G77	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G78	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G8	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G80	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G81	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G84	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G85	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G86	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G87	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G88	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G89	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G9	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G90	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G91	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G94	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G95	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G96	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G97	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
G98	336-072C	BSP(C2600R) 1P LUG STRAIGHT DIP TP SN T0
H1	6631V25014D	GIL-G GIL-G-03 35097-9702_35098-9702 900
H2	6631V25034E	TJC25-4Y TJC25-4Y 35097-9702_35098-9702
H3	387-917J	387-917J 35740-8610 35740-8610 500mM NON
P102	366-921B	GIL-G-03P-S3T2-E 3P 2.54MM 1R STRAIGHT D
P1205	387-A06H	6P(H-B) GIL-G-06 GIL-J-06 450mM 2.50MM 6
P201A	366-921E	GIL-G-06P-S3T2-E 6P 2.50MM 1R STRAIGHT D
P401	366-043K	35929-0410 4P 10.00MM 1R STRAIGHT DIP BK
P601	366-921B	GIL-G-03P-S3T2-E 3P 2.54MM 1R STRAIGHT D
P602	366-921C	GIL-G-04P-S3T2-E 4P 2.54MM 1R STRAIGHT D
P801A	366-043B	35929-0210 2P 10.00MM 1R STRAIGHT DIP BK
P802A	366-043B	35929-0210 2P 10.00MM 1R STRAIGHT DIP BK
P903	366-009D	366-009D 1P PIN HEADER STRAIGHT DIP BK C
P903D	6631V25A16G	GIL-J-04 GIL-J-04 400mM 2.50MM 4P UL1007
P904A	366-921E	GIL-G-06P-S3T2-E 6P 2.50MM 1R STRAIGHT D
P904B	387-B06H	H-B GIL-G GIL-J 450MM 2.50MM 6P UL1185AW
RESISTOR		
FR402	0RP0050H709	SPF92T1KR050 0.05OHM 10% 1/2W 3.2X2.0MM
FR403	0RP0050H709	SPF92T1KR050 0.05OHM 10% 1/2W 3.2X2.0MM
FR404	0RP0050H709	SPF92T1KR050 0.05OHM 10% 1/2W 3.2X2.0MM

LOCA. NO	PART NO	DESCRIPTION
FR405	0RP0050H709	SPF92T1KR050 0.05OHM 10% 1/2W 3.2X2.0MM
FR901	0RF0470K607	FNS02T3JR470 0.47OHM 5% 2W 12.0X4.0MM -
J230	0RD1001F609	RD-96T1J1K00 1KOHM 5% 1/6W 3.2X1.8MM 5.0
J231	0RD1001F609	RD-96T1J1K00 1KOHM 5% 1/6W 3.2X1.8MM 5.0
L203	0RD1001F609	RD-96T1J1K00 1KOHM 5% 1/6W 3.2X1.8MM 5.0
L208	0RD1001F609	RD-96T1J1K00 1KOHM 5% 1/6W 3.2X1.8MM 5.0
L510	0RD0222A609	RDM92T1J22R0 22OHM 5% 1/2W 6.5X2.3MM
R101	0RD3902F609	RD-96T1J39K0 39KOHM 5% 1/6W 3.2X1.8MM -
R103	0RD2202F609	RD-96T1J22K0 22KOHM 5% 1/6W 3.2X1.8MM
R11	0RD3601F609	RD-96T1J3K60 3.6KOHM 5% 1/6W 3.2X1.8MM
R110	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM
R111	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM
R112	0RD6802F609	RD-96T1J68K0 68KOHM 5% 1/6W 3.2X1.8MM
R117	0RD1002F609	RD-96T1J10K0 10KOHM 5% 1/6W 3.2X1.8MM .
R119	0RD3301F609	RD-96T1J3K30 3.3KOHM 5% 1/6W 3.2X1.8MM
R12	0RD2401F609	RD-96T1J2K40 2.4KOHM 5% 1/6W 3.2X1.8MM
R120	0RD4701F609	RD-96T1J4K70 4.7KOHM 5% 1/6W 3.2X1.8MM -
R121	0RD2201F609	RD-96T1J2K20 2.2KOHM 5% 1/6W 3.2X1.8MM
R13	0RD1801F609	RD-96T1J1K80 1.8KOHM 5% 1/6W 3.2X1.8MM
R14	0RD1501F609	RD-96T1J1K50 1.5KOHM 5% 1/6W 3.2X1.8MM
R15	0RD1002F609	RD-96T1J10K0 10KOHM 5% 1/6W 3.2X1.8MM .
R16	0RD5601F609	RD-96T1J5K60 5.6KOHM 5% 1/6W 3.2X1.8MM
R17	0RD3300F609	RD-96T1J330R 330OHM 5% 1/6W 3.2X1.8MM
R19	0RD1301F609	RD-96T1J1K30 1.3KOHM 5% 1/6W 3.2X1.8MM
R203	0RD0682F609	RD-96T1J68R0 68OHM 5% 1/6W 3.2X1.8MM
R204	0RD0752F609	RD-96T1J75R0 75OHM 5% 1/6W 3.2X1.8MM
R205	0RD0912F609	RD-96T1J91R0 91OHM 5% 1/6W 3.2
R206	0RD0752F609	RD-96T1J75R0 75OHM 5% 1/6W 3.2X1.8MM
R207	0RD5602F609	RD-96T1J56K0 56KOHM 5% 1/6W 3.2X1.8MM
R212	0RD1201A609	RDM92T1J1K20 1.2KOHM 5% 1/2W 6.5X2.3MM
R213	0RD1201F609	RD-96T1J1K20 1.2KOHM 5% 1/6W
R215	0RD2402F609	RD-96T1J24K0 24KOHM 5% 1/6W 3.2X1.8MM
R225	0RD4702F609	RD-96T1J47K0 47KOHM 5% 1/6W 3.2X1.8MM -
R226	0RD1001F609	RD-96T1J1K00 1KOHM 5% 1/6W 3.2X1.8MM 5.0
R227	0RD1001F609	RD-96T1J1K00 1KOHM 5% 1/6W 3.2X1.8MM 5.0
R228	0RD4702F609	RD-96T1J47K0 47KOHM 5% 1/6W 3.2X1.8MM -
R23	0RD0151A609	RDM92T1J1R50 1.5OHM 5% 1/2W 6.5X2.3MM
R252	0RD4702F609	RD-96T1J47K0 47KOHM 5% 1/6W 3.2X1.8MM
R253	0RD4702F609	RD-96T1J47K0 47KOHM 5% 1/6W 3.2X1.8MM
R301	0RD2701F609	RD-96T1J2K70 2.7KOHM 5% 1/6W 3.2X1.8MM
R303	0RD2400A609	RDM92T1J240R 240OHM 5% 1/2W 6.5X2.3MM
R304	0RD0561A609	RDM92T1J5R60 5.6OHM 5% 1/2W 6.5X2.3MM
R306	0RD1002F609	RD-96T1J10K0 10KOHM 5% 1/6W 3.2X1.8MM .
R307	0RD3601F609	RD-96T1J3K60 3.6KOHM 5% 1/6W 3.2X1.8MM
R308	0RD4302F609	RD-96T1J43K0 43KOHM 5% 1/6W 3.2X1.8MM
R309	0RD4702F609	RD-96T1J47K0 47KOHM 5% 1/6W 3.2X1.8MM
R310	0RD4702F609	RD-96T1J47K0 47KOHM 5% 1/6W 3.2X1.8MM
R311	0RN0301J607	RN-01T3J3R00 3OHM 5% 1W 12.0X4.0MM
R313	0RD2001F609	RD-96T1J2K00 2KOHM 5% 1/6W 3.2X1.8MM 5.0
R314	0RD4701F609	RD-96T1J4K70 4.7KOHM 5% 1/6W 3.2X1.8MM
R315	0RN0301J607	RN-01T3J3R00 3OHM 5% 1W 12.0X4.0MM NON
R316	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM 5.

For Capacitor & Resistors, the characters at 2nd and 3rd digit in the P/No. means as follows;	CC, CX, CK, CN : Ceramic CQ : Polyester CE : Electrolytic	RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
R317	0RD2702F609	RD-96T1J27K0 27KOHM 5% 1/6W 3.2X1.8MM
R318	0RN2001F409	RN-96T1F2K00 2KOHM 1% 1/6W 3.2X1.8MM 5.0
R319	0RN3902F409	RN-96T1F39K0 39KOHM 1% 1/6W 3.2X1.8MM
R320	0RD1001F609	RD-96T1J1K00 1KOHM 5% 1/6W 3.2X1.8MM 5.0
R321	0RD0561A609	RDM92T1J5R60 5.6OHM 5% 1/2W 6.5X2.3MM
R322	0RD1501F609	RD-96T1J1K50 1.5KOHM 5% 1/6W 3.2X1.8MM
R323	0RD2702F609	RD-96T1J27K0 27KOHM 5% 1/6W 3.2X1.8MM .
R324	0RD4700F609	RD-96T1J470R 470OHM 5% 1/6W 3.2X1.8MM
R325	0RS2701H609	RS-92T1J2K70 2.7KOHM 5% 1/2W 9.0X3.0MM
R326	0RD1501A609	RDM92T1J1K50 1.5KOHM 5% 1/2W 6.5X2.3MM
R328	0RD4302F609	RD-96T1J43K0 43KOHM 5% 1/6W 3.2X1.8MM
R403	0RD5600A609	RDM92T1J560R 560OHM 5% 1/2W 6.5X2.3MM
R407	0RD0332A609	RDM92T1J33R0 33OHM 5% 1/2W 6.5X2.3MM
R408	0RD6801F609	RD-96T1J6K80 6.8KOHM 5% 1/6W 3.2X1.8MM
R409	0RS2202H609	RS-92T1J22K0 22KOHM 5% 1/2W 9.0X3.0MM
R411	0RS1001H609	RS-92T1J1K00 1KOHM 5% 1/2W 9.0X3.0MM
R412	0RD7501A609	RDM92T1J7K50 7.5KOHM 5% 1/2W 6.5X2.3MM
R413	0RD1801A609	RDM92T1J1K80 1.8KOHM 5% 1/2W 6.5X2.3MM
R414	0RS6202J607	RS-01T3J62K0 62KOHM 5% 1W 12.0X4.0MM .
R415	0RD1002F609	RD-96T1J10K0 10KOHM 5% 1/6W 3.2X1.8MM .
R417	0RD3303F609	RD-96T1J330K 330KOHM 5% 1/6W 3.2X1.8MM
R421	0RD3600F609	RD-96T1J360R 360OHM 5% 1/6W 3.2X1.8MM
R422	0RD1002F609	RD-96T1J10K0 10KOHM 5% 1/6W 3.2X1.8MM
R425	0RS2200K619	SMR02R1J220R 220OHM 5% 2W 8.6X3.5MM
R430	0RD1503F609	RD-96T1J150K 150KOHM 5% 1/6W 3.2X1.8MM-
R431	0RD1003A609	RDM92T1J100K 100KOHM 5% 1/2W 6.5X2.3MM
R432	0RD4703F609	RD-96T1J470K 470KOHM 5% 1/6W 3.2X1.8MM -
R434	0RD1003A609	RDM92T1J100K 100KOHM 5% 1/2W 6.5X2.3MM
R436	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM
R437	0RD1002F609	RD-96T1J10K0 10KOHM 5% 1/6W 3.2X1.8MM
R438	0RS0221K619	SML02R0J2R20 2.2OHM 5% 2W 8.6X3.5MM
R439	0RD4301F609	RD-96T1J4K30 4.3KOHM 5% 1/6W 3.2X1.8MM
R440	0RMZVBK002D	RSR05V-J15K0 15KOHM 5% 5W 14X9.5X25.5MM
R443	0RS1001K607	RSD02T3J1K00 1KOHM 5% 2W 12.0X4.0MM
R509	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM
R510	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM .
R511	0RD3301F609	RD-96T1J3K30 3.3KOHM 5% 1/6W 3.2X1.8MM
R512	0RD3301F609	RD-96T1J3K30 3.3KOHM 5% 1/6W 3.2X1.8MM
R513	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM
R518	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM .
R521	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM .
R522	0RD2200F609	RD-96T1J220R 220OHM 5% 1/6W 3.2X1.8MM
R523	0RD2200F609	RD-96T1J220R 220OHM 5% 1/6W 3.2X1.8MM
R524	0RD0752F609	RD-96T1J75R0 75OHM 5% 1/6W 3.2X1.8MM
R525	0RD0752F609	RD-96T1J75R0 75OHM 5% 1/6W 3.2X1.8MM
R534	0RD1504F609	CR1/8TB1M5J 1.5MOHM 5% 1/8W 3.2X1.8MM
R536	0RD1801F609	RD-96T1J1K80 1.8KOHM 5% 1/6W 3.2X1.8MM
R537	0RD1001F609	RD-96T1J1K00 1KOHM 5% 1/6W 3.2X1.8MM
R538	0RD1803F609	RD-96T1J180K 180KOHM 5% 1/6W 3.2X1.8MM
R539	0RD1003F609	RD-96T1J100K 100KOHM 5% 1/6W 3.2X1.8MM
R540	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM .
R543	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM

LOCA. NO	PART NO	DESCRIPTION
R545	0RD0752F609	RD-96T1J75R0 75OHM 5% 1/6W 3.2X1.8MM - A
R547	0RD1203F609	RD-96T1J120K 120KOHM 5% 1/6W 3.2X1.8MM N
R548	0RD2200F609	RD-96T1J220R 220OHM 5% 1/6W 3.2X1.8MM N
R549	0RD3301F609	RD-96T1J3K30 3.3KOHM 5% 1/6W 3.2X1.8MM -
R550	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM 5.
R551	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM 5.
R552	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM 5.
R553	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM 5.
R554	0RD1501F609	RD-96T1J1K50 1.5KOHM 5% 1/6W 3.2X1.8MM 5
R555	0RD6800F609	RD-96T1J680R 680OHM 5% 1/6W 3.2X1.8MM -
R556	0RN3902F409	RN-96T1F39K0 39KOHM 1% 1/6W 3.2X1.8MM N
R557	0RD1202F609	RD-96T1J12K0 12KOHM 5% 1/6W 3.2X1.8MM 5.
R558	0RD2200F609	RD-96T1J220R 220OHM 5% 1/6W 3.2X1.8MM N
R562	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM 5.
R563	0RD1501A609	RDM92T1J1K50 1.5KOHM 5% 1/2W 6.5X2.3MM -
R566	0RN4701F409	RN-96T1F4K70 4.7KOHM 1% 1/6W 3.2X1.8MM N
R567	0RN4701F409	RN-96T1F4K70 4.7KOHM 1% 1/6W 3.2X1.8MM N
R568	0RD2200F609	RD-96T1J220R 220OHM 5% 1/6W 3.2X1.8MM N
R569	0RD1001F609	RD-96T1J1K00 1KOHM 5% 1/6W 3.2X1.8MM 5.0
R572	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM 5.
R576	0RD2200F609	RD-96T1J220R 220OHM 5% 1/6W 3.2X1.8MM N
R577	0RD2200F609	RD-96T1J220R 220OHM 5% 1/6W 3.2X1.8MM N
R580	0RD4701F609	RD-96T1J4K70 4.7KOHM 5% 1/6W 3.2X1.8MM -
R581	0RD4701F609	RD-96T1J4K70 4.7KOHM 5% 1/6W 3.2X1.8MM -
R582	0RD4702F609	RD-96T1J47K0 47KOHM 5% 1/6W 3.2X1.8MM -
R583	0RD4702F609	RD-96T1J47K0 47KOHM 5% 1/6W 3.2X1.8MM -
R584	0RD0101F609	RD-96T1J1R00 1OHM 5% 1/6W 3.2X1.8MM NON
R585	0RD0101F609	RD-96T1J1R00 1OHM 5% 1/6W 3.2X1.8MM NON
R587	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM .
R591	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM
R592	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM .
R595	0RD6800F609	RD-96T1J680R 680OHM 5% 1/6W 3.2X1.8MM -
R606	0RD8202F609	RD-96T1J82K0 82KOHM 5% 1/6W 3.2X1.8MM
R608	0RD4702F609	RD-96T1J47K0 47KOHM 5% 1/6W 3.2X1.8MM -
R611	0RD1202F609	RD-96T1J12K0 12KOHM 5% 1/6W 3.2X1.8MM
R612	0RD8202F609	RD-96T1J82K0 82KOHM 5% 1/6W 3.2X1.8MM
R613	0RD4702F609	RD-96T1J47K0 47KOHM 5% 1/6W 3.2X1.8MM
R616	0RD7502F609	RD-96T1J75K0 75KOHM 5% 1/6W 3.2X1.8MM
R617	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM .
R618	0RD4702F609	RD-96T1J47K0 47KOHM 5% 1/6W 3.2X1.8MM
R619	0RD7502F609	RD-96T1J75K0 75KOHM 5% 1/6W 3.2X1.8MM
R811	0RD1002F609	RD-96T1J10K0 10KOHM 5% 1/6W 3.2X1.8MM .
R812	0RD4701F609	RD-96T1J4K70 4.7KOHM 5% 1/6W 3.2X1.8MM -
R813	0RD1001F609	RD-96T1J1K00 1KOHM 5% 1/6W 3.2X1.8MM
R816	0RD4701F609	RD-96T1J4K70 4.7KOHM 5% 1/6W 3.2X1.8MM
R817	0RD4701F609	RD-96T1J4K70 4.7KOHM 5% 1/6W 3.2X1.8MM
R819	0RP0050H709	SPF92T1KR050 0.05OHM 10% 1/2W 3.2X2.0MM
R820	0RD1000F609	RD-96T1J100R 100OHM 5% 1/6W 3.2X1.8MM
R821	0RD4701F609	RD-96T1J4K70 4.7KOHM 5% 1/6W 3.2X1.8MM
R822	0RP0020J809	SPF01T1MR020 0.02OHM 20% 1W 6.5X2.3MM
R823	0RP0020J809	SPF01T1MR020 0.02OHM 20% 1W 6.5X2.3MM
R824	0RD2701F609	RD-96T1J2K70 2.7KOHM 5% 1/6W 3.2X1.8MM

For Capacitor & Resistors, the characters at 2nd and 3rd digit in the P/No. means as follows;	CC, CX, CK, CN : Ceramic CQ : Polyester CE : Electrolytic	RD : Carbon Film RS : Metal Oxide Film RN : Metal Film RF : Fusible

LOCA. NO	PART NO	DESCRIPTION
R825	0RD1001F609	RD-96T1J1K00 1KOHM 5% 1/6W 3.2X1.8MM
R826	0RD0472F609	RD-96T1J47R0 47OHM 5% 1/6W 3.2X1.8MM
R829	0RP0050H709	SPF92T1KR050 0.05OHM 10% 1/2W 3.2X2.0MM
R830	0RN1803F409	RN-96T1F180K 180KOHM 1% 1/6W 3.2X1.8MM
R831	0RN3002F409	RN-96T1F30K0 30KOHM 1% 1/6W 3.2X1.8MM .
R832	0RD3902F609	RD-96T1J39K0 39KOHM 5% 1/6W 3.2X1.8MM -
R834	0RN4701F409	RN-96T1F4K70 4.7KOHM 1% 1/6W 3.2X1.8MM
R835	0RKZVTA001C	RN-92T1J8M20 8.2MOHM 5% 1/2W 9.0X3.0MM
R836	0RD1001F609	RD-96T1J1K00 1KOHM 5% 1/6W 3.2X1.8MM
R838	0RD2200A609	RDM92T1J220R 220OHM 5% 1/2W 6.5X2.3MM
R839	0RD1003F609	RD-96T1J100K 100KOHM 5% 1/6W 3.2X1.8MM
R841	0RF0221K607	FNS02T3J2R20 2.2OHM 5% 2W 12.0X4.0MM 5M
R842	0RD2201F609	RD-96T1J2K20 2.2KOHM 5% 1/6W 3.2X1.8MM
R843	0RD2203F609	RD-96T1J220K 220KOHM 5% 1/6W 3.2X1.8MM
R844	0RD1501F609	RD-96T1J1K50 1.5KOHM 5% 1/6W 3.2X1.8MM
R845	0RD0332F609	RD-96T1J33R0 33OHM 5% 1/6W 3.2X1.8MM
R846	180-A01D	PRW02T3JR160 0.16OHM 5% 2W 12.0X4.0MM -
R847	0RD4300F609	RD-96T1J430R 430OHM 5% 1/6W 3.2X1.8MM -
R848	0RS4702K619	SML02R0J47K0 47KOHM 5% 2W 8.6X3.5MM
R849	0RS4702K607	RSD02T3J47K0 47KOHM 5% 2W 12.0X4.0MM
R850	0RD4701F609	RD-96T1J4K70 4.7KOHM 5% 1/6W 3.2X1.8MM -
R851	0RD8202F609	RD-96T1J82K0 82KOHM 5% 1/6W 3.2X1.8MM -
R852	0RD1003F609	RD-96T1J100K 100KOHM 5% 1/6W 3.2X1.8MM -
R853	0RD1001F609	RD-96T1J1K00 1KOHM 5% 1/6W 3.2X1.8MM 5.0
R856	180-822N	RWR07PDJ1R00 1OHM 5% 7W 36X9.5X9.5MM
R858	0RKZVTA001K	RN-92T1J470K 470KOHM 5% 1/2W 9.0X3.0MM -
R859	0RD1002A609	RDM92T1J10K0 10KOHM 5% 1/2W 6.5X2.3MM
R860	0RF0221K607	FNS02T3J2R20 2.2OHM 5% 2W 12.0X4.0MM 5M
R861	0RD3901F609	RD-96T1J3K90 3.9KOHM 5% 1/6W 3.2X1.8MM 1
R901	0RD2200F609	RD-96T1J220R 220OHM 5% 1/6W 3.2X1.8MM
R902	0RD2200F609	RD-96T1J220R 220OHM 5% 1/6W 3.2X1.8MM
R903	0RD2200F609	RD-96T1J220R 220OHM 5% 1/6W 3.2X1.8MM
R906	0RD1201A609	RDM92T1J1K20 1.2KOHM 5% 1/2W 6.5X2.3MM
R907	0RD1201A609	RDM92T1J1K20 1.2KOHM 5% 1/2W 6.5X2.3MM
R908	0RD1201A609	RDM92T1J1K20 1.2KOHM 5% 1/2W 6.5X2.3MM
R909	0RS2201H609	RSD92T1J2K20 2.2KOHM 5% 1/2W 6.5X2.3MM N
R910	0RS2201H609	RSD92T1J2K20 2.2KOHM 5% 1/2W 6.5X2.3MM N
R911	0RS2201H609	RSD92T1J2K20 2.2KOHM 5% 1/2W 6.5X2.3MM N
R912	0RD2204A609	RDM92T1J2M20 2.2MOHM 5% 1/2W 6.5X2.3MM
R920	0RD4703A609	RDM92T1J470K 470KOHM 5% 1/2W 6.5X2.3MM
R925	0RD2200F609	RD-96T1J220R 220OHM 5% 1/6W 3.2X1.8MM

SWITCH

LOCA. NO	PART NO	DESCRIPTION
SW11	140-315A	THVH472GBC 1C1P 12VDC 0.05A VERTICAL
SW12	140-315A	THVH472GBC 1C1P 12VDC 0.05A VERTICAL
SW13	140-315A	THVH472GBC 1C1P 12VDC 0.05A VERTICAL
SW14	140-315A	THVH472GBC 1C1P 12VDC 0.05A VERTICAL
SW15	140-315A	THVH472GBC 1C1P 12VDC 0.05A VERTICAL
SW16	140-315A	THVH472GBC 1C1P 12VDC 0.05A VERTICAL
SW801	6600VM1001A	SDKLA1 AC 250VAC 5A 1PCS 1C1P VERTICAL

SPARK GAP, AXIAL

LOCA. NO	PART NO	DESCRIPTION
SG901	165-004A	152F-L3N/S-23 RADIAL 1.5KV 1.5KV - 5MM B
SG902	165-004A	152F-L3N/S-23 RADIAL 1.5KV 1.5KV - 5MM B
SG903	165-004A	152F-L3N/S-23 RADIAL 1.5KV 1.5KV - 5MM B
SG904	6918VAX002H	WSP-122N AXIAL 1.2KV 1.2KV - - TP
SG911	6918VAX002E	WSP-351M AXIAL 350V 350V - 7.5MM TP
SG912	6918VAX002E	WSP-351M AXIAL 350V 350V - 7.5MM TP
SG913	6918VAX002E	WSP-351M AXIAL 350V 350V - 7.5MM TP

FILTER & CRYSTAL

LOCA. NO	PART NO	DESCRIPTION
FB401	125-022K	125-022K 20OHM 3.5X6MM AXIAL TP
FB802	125-022K	125-022K 20OHM 3.5X6MM AXIAL TP
FB803	125-022K	125-022K 20OHM 3.5X6MM AXIAL TP
FB833	125-022K	125-022K 20OHM 3.5X6MM AXIAL TP
FB846	125-022R	BI3857 30OHM 3.6X5.7MM AXIAL TP
T803	150-F06W	150-F06W 27MH 32X22X38MM SQE2930S
X01	156-A01Z	HC-49/U 24.576MHZ 50PPM 24.576MHZ 50PPM
Z101	166-A01B	K3953M 33.90MHZ 38.90MHZ 17X3.9X8.7MM RA
Z102	6200QL3003G	K9650M(B39389-K9650-M100) 33.90_38.90MHZ

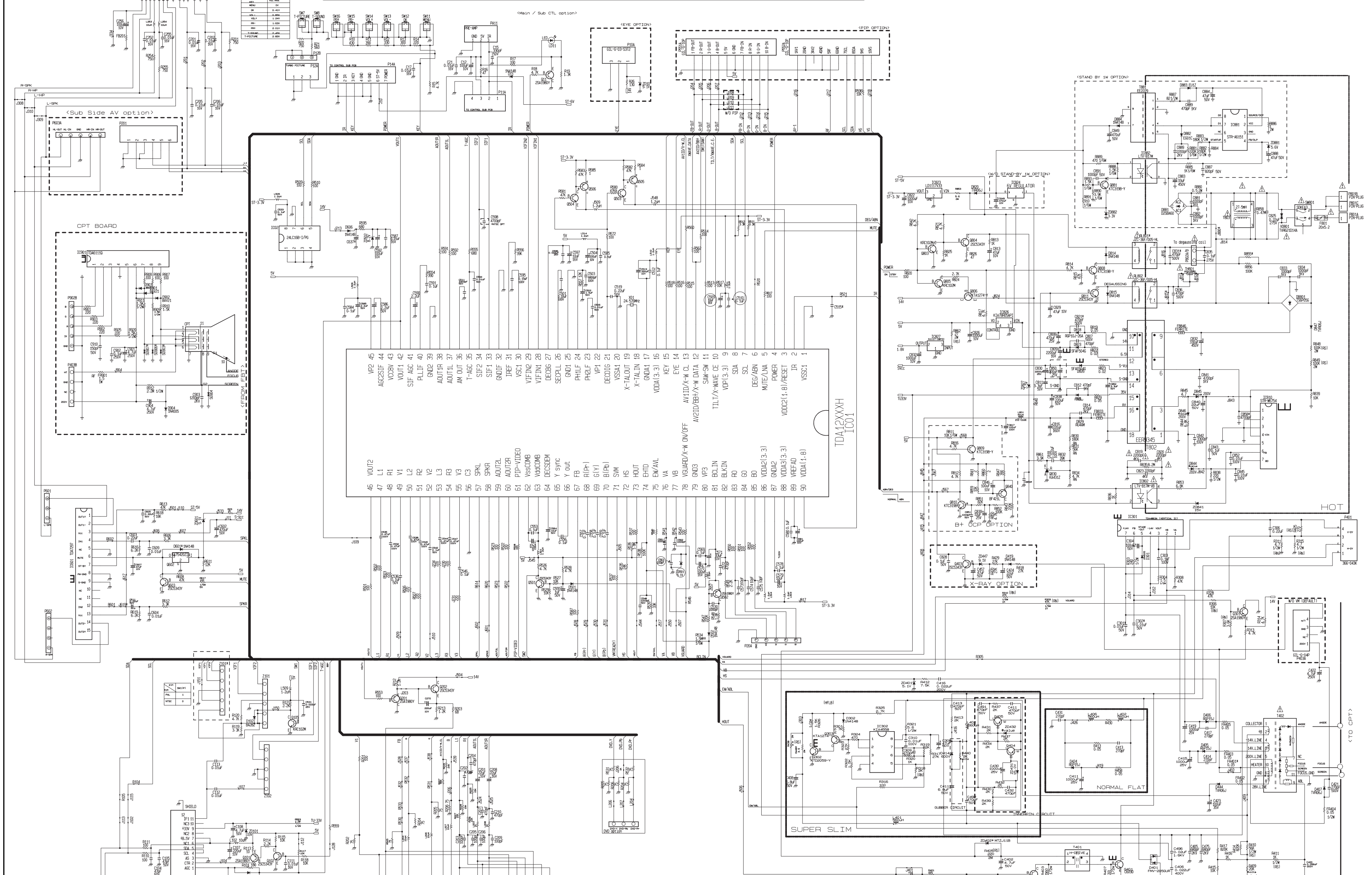
ACCESSORIES

LOCA. NO	PART NO	DESCRIPTION
A1	MFL30441111	Manual EU MK/REG HU/BU/EN 30036801/2/3/4
	MFL30441112	Manual USER CW62B LG EU PL 017B
	MFL30441113	Manual USER CW62B LG EU RO
	MFL30441115	Manual LG EU CZ CZ/SK/HU/PL
	MFL30441120	Manual USER CW62B LG EU BALTIC ES/LV/LT
	MFL30441122	Manual CW62B LG EU UKR/BZ03 RU/EN
	MFL30441125	Manual CW62B LG EU HU/BU/SE/EN 0051A
A2	MKJ30036802	Remote Controller MOLD HIPS 60HR CW62A
A3	5010V00004D	Antenna,Rod 3SECTION 750MM NT
	5010V00004B	Antenna,Rod SINGLE 2.5DB 3000H

MISCELLANEOUS

LOCA. NO	PART NO	DESCRIPTION
B1	3890900225C	Box 21FS2RLX-TC.QDRVLBK 21"" DWR2 652-
	3890900225M	BOX DW2 652 462 505 2 COLOR 21
	MAY30423401	BOX DW 644 440 497 2 COLOR TDR 21FS2R
B2	3890900096D	Box DW2 1074 1104 1080 1 COLOR
B3	372-N74B	Box SW 0 0 0 NO PRINTING CHASS
	3890900097D	Box DW2 1094 1124 100 1 COLOR MC049B/049C
B4	3890V01828B	Box SWR2 703 372 312 1 COLOR 25/29Q4
F801	0FS4001B51D	Fuse,Time Delay 0218 004. GLASS 250V
JK202	6612M00005A	Jack,Scart UPJ-R1-027 21P 21P/1C 3.81MM
	6612VJH023D	Jack,Scart PPJ126-04 15MM 3RX3C ANGLE
PA11	6726VV0006H	Receiver Module TSOP2238NN1 4.5TO5.5V
PJ1202	6613V00004B	Jack,RCA PJ6054B 14.0MM 3RX1C ANGLE TR
RL802	6920VB1001K	Relay,Contact JZC-36F-005-HL AC250V/DC30V
SK901	6620VBC003A	Socket,CRT PCS030A 8P STRAIGHT 15.24MM
TH801	163-058D	Thermistor,PTC J503P83D070M290X 14OHM
TU101	6700MF0018A	Tuner,Analog TAEA-G011D PAL-B/G+I+M+D/K
VD801	164-003G	Varistor TVR14621 620V 10% 250pF 14MM

SCHEMATIC DIAGRAM OF CW62B



THE ⚠ SYMBOL MARK OF THIS SCHEMETIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION. FILRE AND ELECTRICAL SHOCK HAZARDS, WHEN SERVICING IF IS ESSENTIAL THAT ONLY MANUFATURES SPECFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE ⚠ SYMBOL MARK OF THE SCHEMETIC.

P/No : EBY31683801
2006.08.22

SVC. SHEET : EBY31683801-S